

HIKVISION

iVMS-4200 PCNVR

User Manual (V1.03)

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Thank you for purchasing our product. If there is any question or request, please do not hesitate to contact the dealer.

This manual applies to **iVMS-4200 PCNVR**.

This manual may contain several technically inaccurate points or printing errors, and the content is subject to change without notice. The updates will be added into the new version of this manual. We will readily improve or update the products or procedures described in the manual.

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Chapter 1 Overview

1.1 Description

iVMS-4200 PCNVR is designed to manage the embedded network surveillance devices, such as network cameras and video encoders, and provides mainly storage and management function for the input video stream. It functions as a NVR installed on your PC, only it does not have a specific hardware device and dedicated record file storage HDDs. The software cuts the complexity of the surveillance application, meeting the needs of small and medium scale projects.

1.2 Running Environment

Operating system: Microsoft Windows 7/Windows 2008(32/64-bit operating system), Windows 2003/Windows XP(32-bit operating system)

CPU: Intel Pentium IV 3.0 GHz or above

Memory: 1G or above

Display: 1024*768 or above

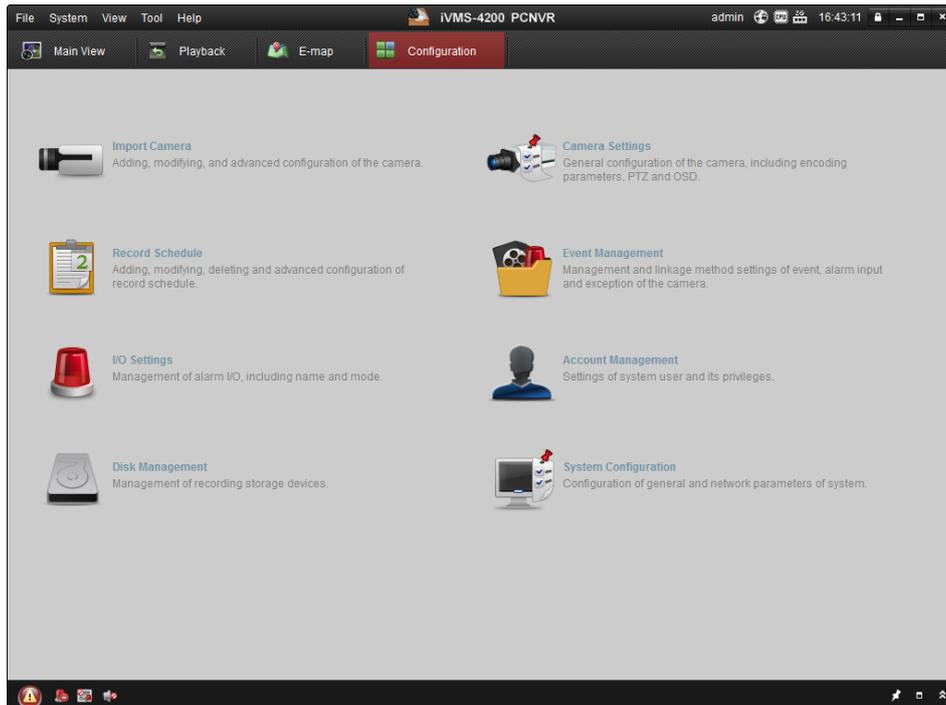
Note: For high stability and good performance, these above system requirements must be met.

1.3 Conventions

In this document, the iVMS-4200 PCNVR software is referred as software, or PCNVR.

1.4 Function Modules

Main Interface of iVMS-4200 PCNVR:



Menu Bar:

File	Open Captured picture	Search and view the captured pictures stored on local PC.
	Open Video File	View the backup video files stored on local PC.
	Open Log File	View the backup log files stored on local PC.
	Exit	Exit the iVMS-4200 PCNVR software.
	AutoRun	Run the PCNVR or the operating system automatically.
System	Lock	Lock screen operations. Log in the client again to unlock.
	Switch User	Switch the login user.
	Import Configuration File	Import software configuration file from your computer.
	Export Configuration File	Export software configuration file to your computer.
	Restore Default Settings	Restore the default settings of the system.
View	1024*768	Display the window at size of 1024*768 pixels.
	1280*1024	Display the window at size of 1280*1024 pixels.
	1440*900	Display the window at size of 1440*900 pixels.
	1680*1050	Display the window at size of 1680*1050 pixels.
	Full Screen	Display the window in full screen.
	Main View	Open the Main View page.
	Playback	Open the Playback page.
	E-map	Open the E-map page.
	Configuration	Open the Configuration page.
	Auxiliary Screen Preview	Open Auxiliary Screen Preview window.
Tool	Import Camera	Open the Import Camera page.
	Camera Settings	Open the Camera Settings page.
	Record Schedule	Open the Record Schedule page.
	Event Management	Open the Event Management page.

	I/O Settings	Open the I/O Settings page.
	Account Management	Open the Account Management page.
	Disk Management	Open the Disk Management page.
	System Configuration	Open the System Configuration page.
	Log Search	Open the Log Search page.
	Broadcast	Select camera to start broadcasting.
	I/O Control	Turn on/off the alarm output.
	Soft Keyboard	Enable the soft keyboard function.
Help	Open Wizard	Open the guide for the software configuration.
	User Manual (F1)	Click to open the User Manual; you can also open the User Manual by pressing F1 on your keyboard.
	About	View the basic information of the software.
	Language	Select the language for the software and the software will reboot automatically to activate the settings.

The iVMS-4200 PCNVR is composed of the following function modules:



Main View

The Main View module provides live view of network cameras and video encoders, and supports some basic operations, such as picture capturing, recording, PTZ control, etc.



Playback

The Playback module provides the search, playback, export of record files.



E-map

The E-map module provides the displaying and management of E-maps, alarm inputs, hot regions and hot spots.



Configuration

The Configuration module is composed of 8 function sub-modules: Import Camera, Camera Settings, Record Schedule, etc.

The Configuration module is composed of the following 8 function sub-modules:



Import Camera

Add, modify and delete the network camera and video encoder; provide remote configuration for the added device.



Camera Settings

Configure the picture settings, encoding parameters, on screen display(OSD) settings, PTZ control parameters, etc.



Record Schedule

Configure record parameters and set up schedule template to be used in recording.



Event Management

Set up recordings and alarms by defining triggers and linkage actions.



I/O Settings

Turn on/off the alarm output.



Account Management

Add, modify and delete the user accounts and assign different permissions for the users.



Disk Management

Pre-allocate the HDDs for record file storage.



System Configuration

Configure the general parameters, file saving paths, alarm sounds and other system settings.

The function modules or sub-modules are easily accessed by clicking on the navigation buttons on the main interface of PCNVR or by selecting the function module from the **View** or **Tool** menu.

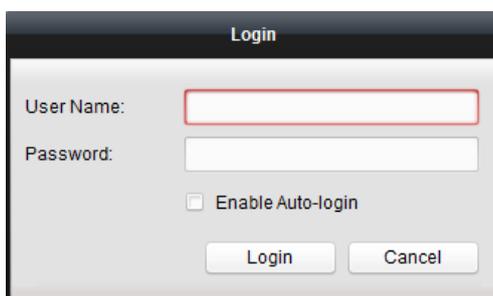
You can check the information, including current user, network usage, CPU usage, memory usage and time in the upper-right corner of the main page.

Chapter 2 Starting iVMS-4200 PCNVR

2.1 User Login

Steps:

1. Input the user name and password. By default, the user name and password are *admin* and *12345*.
2. Optionally, check the checkbox **Enable Auto-login** to log in the software automatically.
3. Click **Login**.



After running the software, a wizard will pop up to guide you to add the device and do some basic settings.

2.2 Pre-allocating HDDs

Purpose:

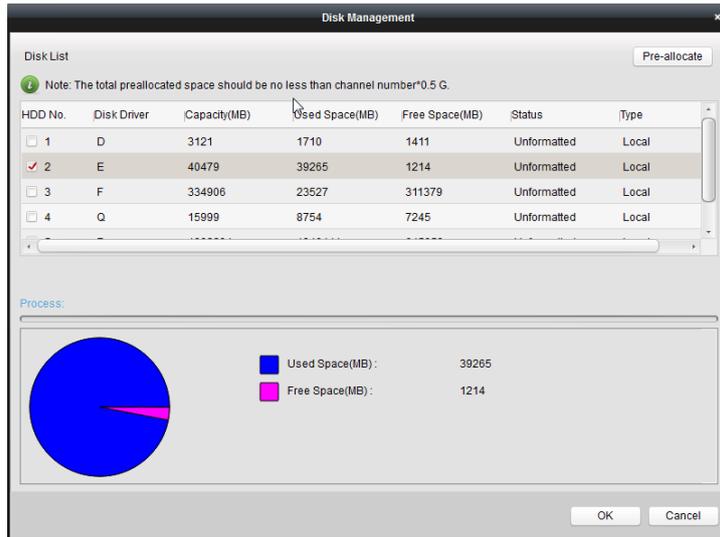
PCNVR does not have dedicated storage HDDs and the record files are stored in the local disk of the PC running the software. The HDDs of the PC need to be pre-allocated for the record file storage.

Steps:

1. Click the  icon on the Configuration panel, or click **Tool->Disk Management** to open the Disk Management page.
2. Check the checkbox to select the disk. The space usage of the disk will be displayed.
3. Click **Pre-allocate** to pre-allocate the selected disk.
4. Click **OK** in the pop-up dialog box to continue the disk pre-allocation. You can check the pre-allocation process in the process bar.
5. Click **OK** in the pop-up dialog box after the pre-allocation completed and reboot the software to activate the new settings.
6. Log in the software again. The status of the pre-allocated disk changes from *Unformatted* to *Normal*.

Notes:

- The total space of pre-allocated HDDs should be no less than *channel number*0.5G*.
- The original data of pre-allocated HDDs will not be deleted.

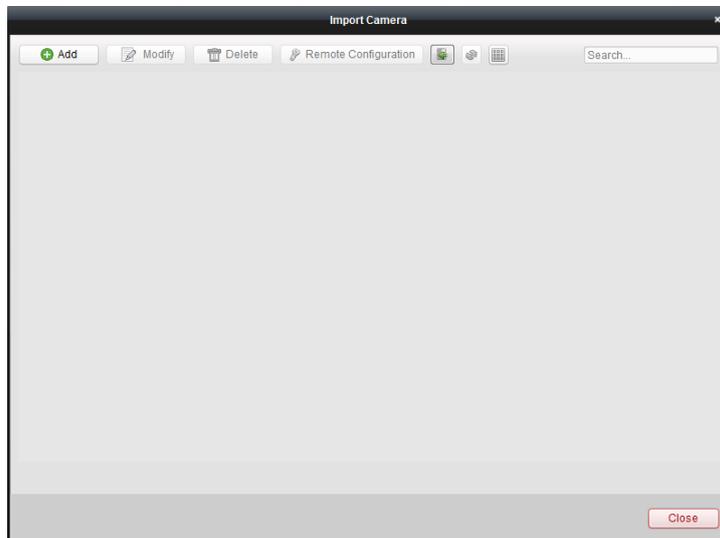


2.3 Adding the Devices

Purpose:

After running iVMS-4200 PCNVR, the devices including network cameras and video encoders, should be added to the system for remote recording and management.

Click the  icon on the Configuration panel, or click **Tool->Import Camera** to open the Import Camera page.



You can add the devices in the following ways:

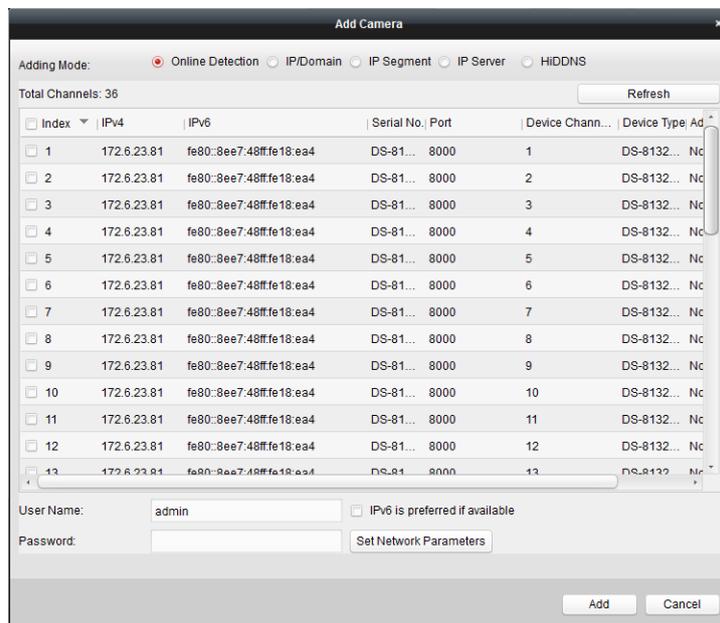
- By detecting the online devices, see *Adding Online Devices*.
- By specifying the device IP address, see *Adding Devices Manually*.
- By specifying an IP segment, see *Adding Devices by IP Segment*.
- By IP Server, see *Adding Devices by IP Server*.
- By HiDDNS, see *Adding Devices by HiDDNS*.

Note: Click the icon , and you can import the cameras to PCNVR from the database of iVMS-2000.

Adding Online Devices

Steps:

1. Open the Import Camera page and click **Add** to enter the Camera Adding interface.
2. Select **Online Detection** as the adding mode. The active online cameras and video encoders in the same local subnet with the software will be displayed on a list.
3. Check the checkboxes to select the devices to add.
You can click **Refresh** to refresh the information of online devices.
4. Input the device user name and password. By default, the device user name and password are *admin* and *12345*.
5. Click **Add** to add the selected devices.
The IPv6 address of the device is preferred if available.
You can click **Set Network Parameters** to configure the network information of the device.



Adding Devices Manually

Steps:

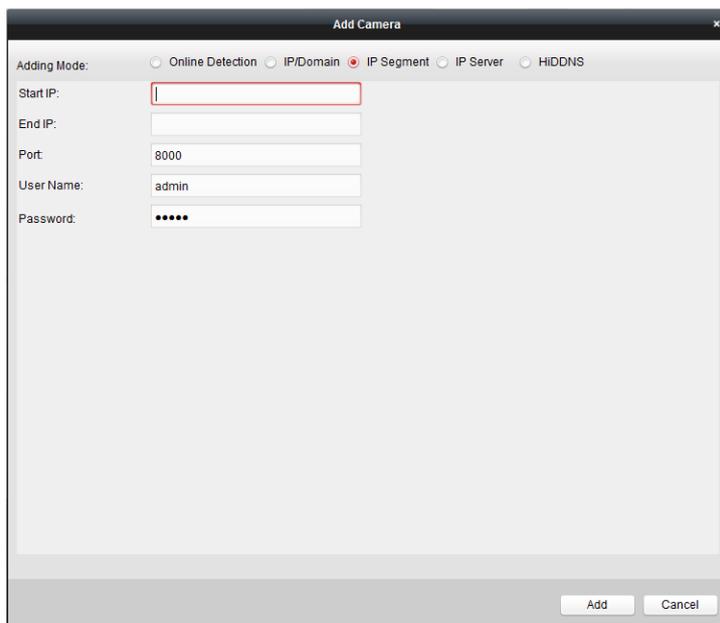
1. Open the Import Camera page and click **Add** to enter the Camera Adding interface.
2. Select **IP/Domain** as the adding mode.
3. Input the required information.
 - Address:** Input the device's IP address or domain name.
 - Port:** Input the device port number. The default value is *8000*.
 - User Name:** Input the device user name. By default, the user name is *admin*.
 - Password:** Input the device password. By default, the password is *12345*.
4. Click **Add** to add the device.

The screenshot shows the 'Add Camera' dialog box. The 'Adding Mode' section has five radio buttons: 'Online Detection', 'IP/Domain' (selected), 'IP Segment', 'IP Server', and 'HIDDNS'. The 'Address' field is empty. The 'Port' field contains '8000'. The 'User Name' field contains 'admin'. The 'Password' field contains six dots. The 'Add' and 'Cancel' buttons are at the bottom right.

Adding Devices by IP Segment

Steps:

1. Open the Import Camera page and click **Add** to enter the Camera Adding interface.
2. Select **IP Segment** as the adding mode.
3. Input the required information.
 - Start IP:** Input a start IP address.
 - End IP:** Input an end IP address in the same network segment with the start IP.
 - Port:** Input the device port number. The default value is *8000*.
 - User Name:** Input the device user name. By default, the user name is *admin*.
 - Password:** Input the device password. By default, the password is *12345*.
4. Click **Add**, and the device of which the IP address is between the start IP and end IP will be added to the camera list.



The screenshot shows the 'Add Camera' dialog box. At the top, there are five radio buttons for 'Adding Mode': 'Online Detection', 'IP/Domain', 'IP Segment' (which is selected), 'IP Server', and 'HIDDNS'. Below these are several input fields: 'Start IP:' (with a red border), 'End IP:', 'Port:' (with the value '8000'), 'User Name:' (with the value 'admin'), and 'Password:' (with five dots). At the bottom right, there are two buttons: 'Add' and 'Cancel'.

Adding Devices by IP Server

Steps:

1. Open the Import Camera page and click **Add** to enter the Camera Adding interface.
2. Select **IP Server** as the adding mode.
3. Input the required information.

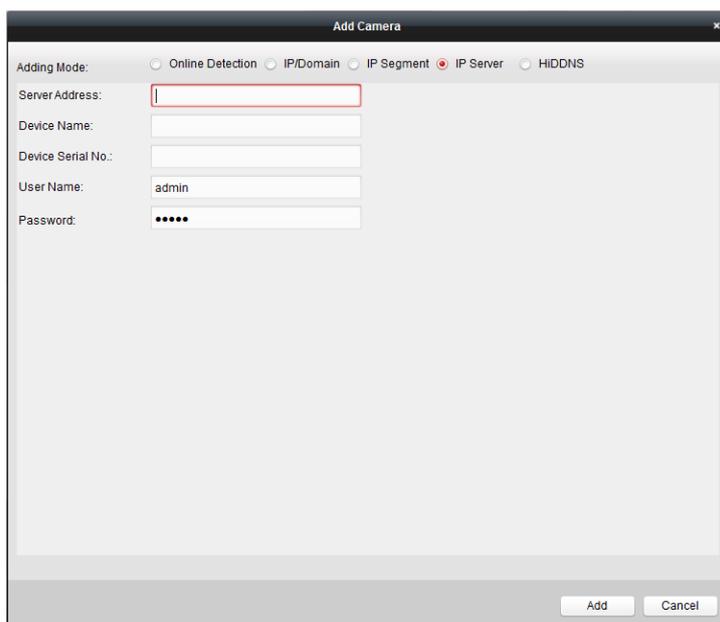
Server Address: Input the IP Server address.

Device Name/Device Serial No.: Input either device name or device ID registered on the IP server.

User Name: Input the device user name. By default, the user name is *admin*.

Password: Input the device password. By default, the password is *12345*.

4. Click **Add** to add the device.



The screenshot shows the 'Add Camera' dialog box. At the top, there are five radio buttons for 'Adding Mode': 'Online Detection', 'IP/Domain', 'IP Segment', 'IP Server' (which is selected), and 'HIDDNS'. Below these are several input fields: 'Server Address:' (with a red border), 'Device Name:', 'Device Serial No.:', 'User Name:' (with the value 'admin'), and 'Password:' (with five dots). At the bottom right, there are two buttons: 'Add' and 'Cancel'.

Adding Devices by HiDDNS

Steps:

1. Open the Import Camera page and click **Add** to enter the Camera Adding interface.
2. Select **HiDDNS** as the adding mode.
3. Input the required information.

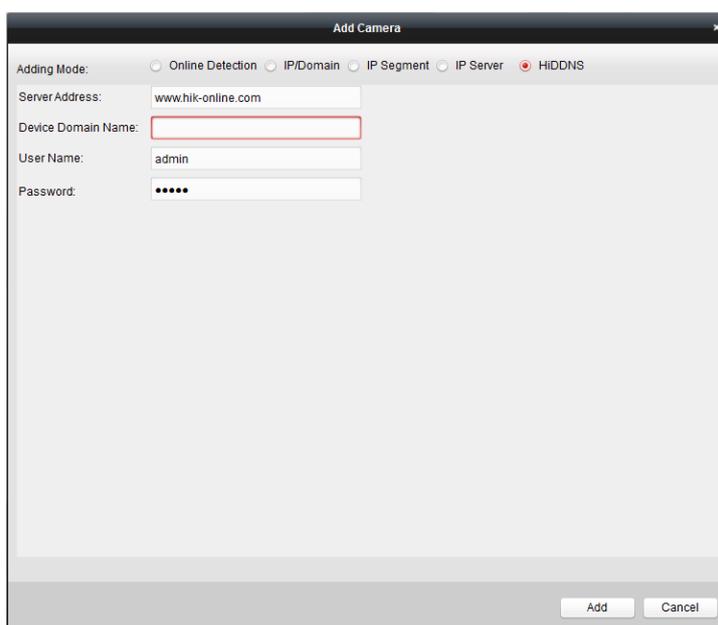
Server Address: www.hik-online.com.

Device Domain Name: Input the device domain name registered on the HiDDNS server.

User Name: Input the device user name. By default, the user name is *admin*.

Password: Input the device password. By default, the password is *12345*.

4. Click **Add** to add the device.



Camera Management

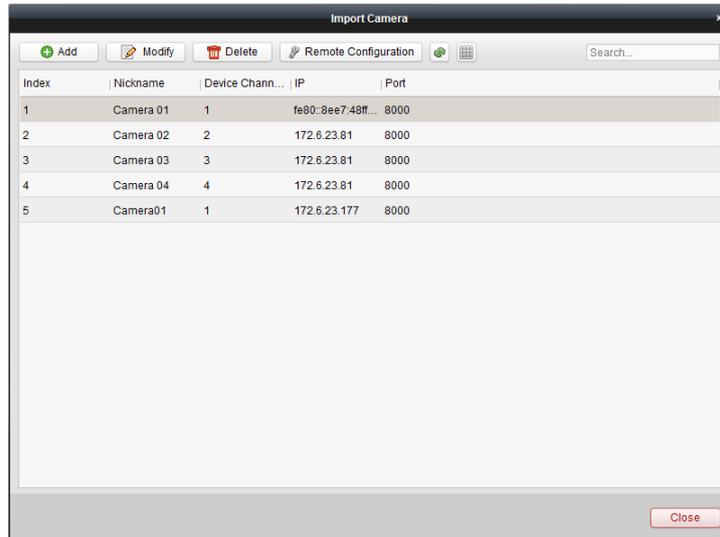
The cameras will be displayed on the list for management after added successfully. You can check the nickname, device channel number, IP address and port of the cameras.

Click the icon  to refresh the information of all added cameras. You can also use the search field to locate desired cameras.

Click the icon  to display the added cameras in thumbnail/list view mode.

Select the camera from the list, click **Modify/Delete**, and then you can modify/delete the information of the selected camera.

Select the camera from the list, click **Remote Configuration**, and then you can do some remote configurations of the selected camera if needed.



2.4 Configuring Record Schedule

Purpose:

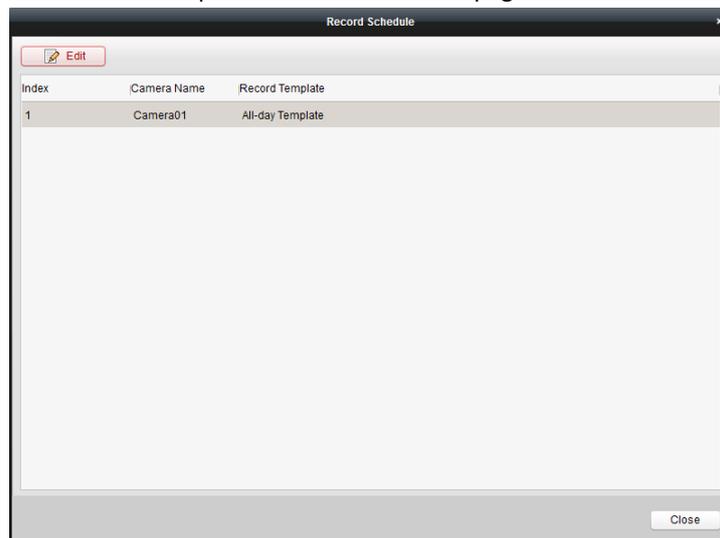
The record schedule can be set for one or more cameras for continuous, alarm triggered or motion detection triggered recording. And the record files can be searched for remote playback.

Before you start:

Devices, including the cameras and video encoders, should be added to the software.

Click the  icon on the Configuration panel,

or click **Tool->Record Schedule** to open the Record Schedule page.



Steps:

1. Open the Record Schedule page.
2. Select the camera from the list and click **Edit**,
or double-click the channel in the list to enter the Modify Record Schedule interface.
3. Select the channel name from the drop-down list.

4. Click **Motion Settings**, and click-and-drag the mouse to draw a defined area for motion detection. You can click the icon  to set the whole video area as the detection area, click the icon  to delete the selected area, or click the icon  to clear all the detection areas.
5. Set the record parameters. For details, see *Table 2.1 Record Parameters*.
6. Check the checkbox **Enable Record Schedule** to enable the schedule recording.
7. Select the record schedule template from the drop-down list.

All-day Template: for all-day continuous recording.

Weekday Template: for working-hours continuous recording from 8:00 AM to 8:00 PM.

Alarm or Motion Template: for alarm input triggered or motion detection triggered recording.

Template 01-08: fixed templates for specific schedules. You can edit the templates if needed.

Custom: can be customized as desired.

If you need to edit or customize the template, click **Edit** to enter the Templates Management interface. For details, see *Configuring Record Schedule Template*.
8. Click **Advanced Settings** to set the parameters of scheduled capture and event capture.
9. Optionally, click **Copy to...** to copy the record schedule settings to other cameras.
10. Click **OK** to save the settings.

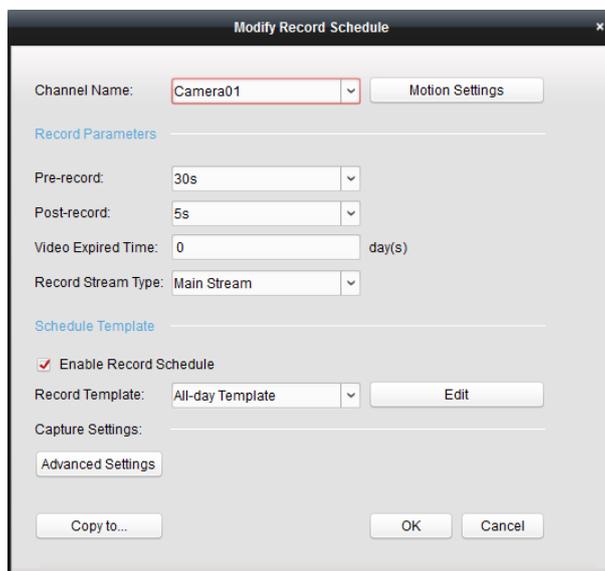


Table 2.1 Record Parameters

Parameters	Descriptions
Pre-record	Normally used for the event triggered record, when you want to record before the event happens
Post-record	After the event finished, the video can also be recorded for a certain time.
Video Expired Time	The time for keeping the record files in the storage device, once exceeded, the files will be deleted. The files will be saved permanently if the value is set as 0.
Record Stream Type	Record the video files in main stream or sub-stream.

Configuring Record Schedule Template

Perform the following steps to configure the record schedule template to be applied:

If **Template 01-08** is selected, start from step 1;

If **Custom** is selected, start from step 2.

1. Click **Edit**. You can edit the template name.
2. Set the time schedule for the selected template.

 **Schedule Recording** refers to the normal schedule record. The time bar is green.

 **Motion Detection** refers to the record triggered by motion detection. The time bar is orange.

 **Alarm** refers to the record triggered by alarm input. The time bar is red.

 **Alarm | Motion** refers to the record triggered by alarm input or motion. The time bar is purple.

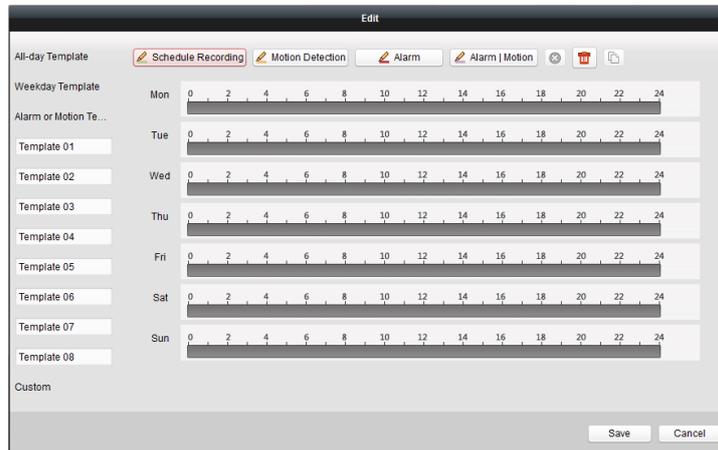
When the cursor turns to , you can edit the schedule time bar.

When the cursor turns to , you can move the selected time bar you just edited.

When the cursor turns to , you can lengthen or shorten the selected time bar.

3. Optionally, you can select the schedule time bar, and then click the icon  to delete the selected time bar, or click the icon  to delete all the time bars, or click the icon  to copy the time bar settings to the other dates.
4. Click **Save** to save the settings.

Note: Up to 8 time periods can be set for each day in the record schedule.



2.5 Account Management

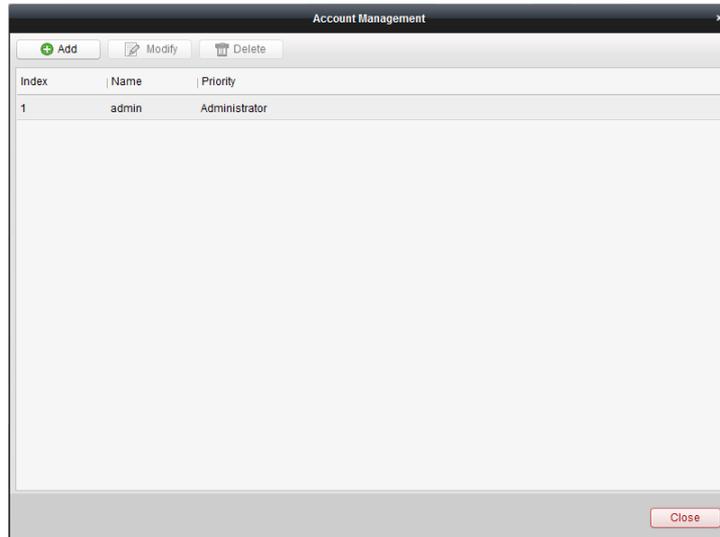
Purpose:

Multiple user accounts can be added to the software, and you are allowed to assign different permissions for different users if needed.

Click the  icon on the Configuration panel,

or click **Tool-> Account Management** to open the Account Management page.

Note: By default, the user account *admin* is the super administrator of the software and the password is 12345.

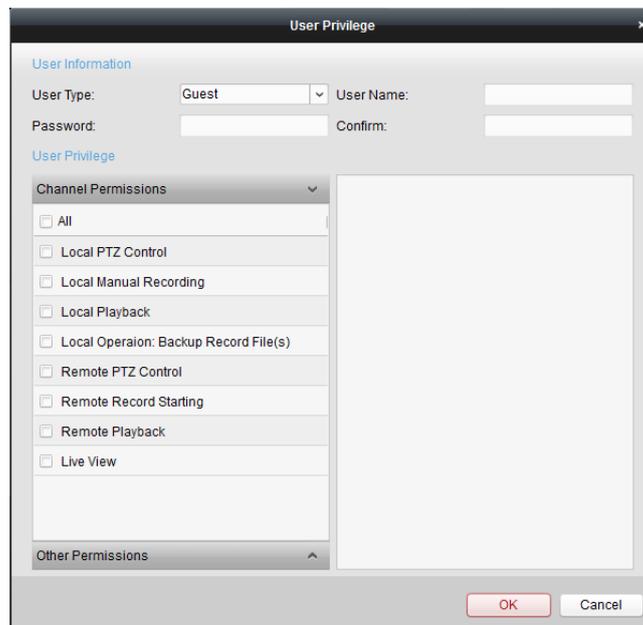


Adding the User

Steps:

1. Open the Account Management page.
2. Click **Add** to open the User Privilege dialog box.
3. Select the user type from the drop-down list. 2 types of user accounts are selectable: Guest and Operator.
4. Input the user name, password and confirm password as desired.
5. Check the checkboxes to assign channel permissions and other permissions for the created user.
6. Click **OK** to save the settings.

Note: Up to 32 user accounts can be added for the software.



Managing the User

Purpose:

After created successfully, the user account is added to the user list on the Account Management page. You can edit or delete the information of the user accounts.

To edit the information of the user, select the user from the list, and click **Modify**.

To delete the information of the user, select the user from the list, and click **Delete**.

Chapter 3 Live View

Purpose:

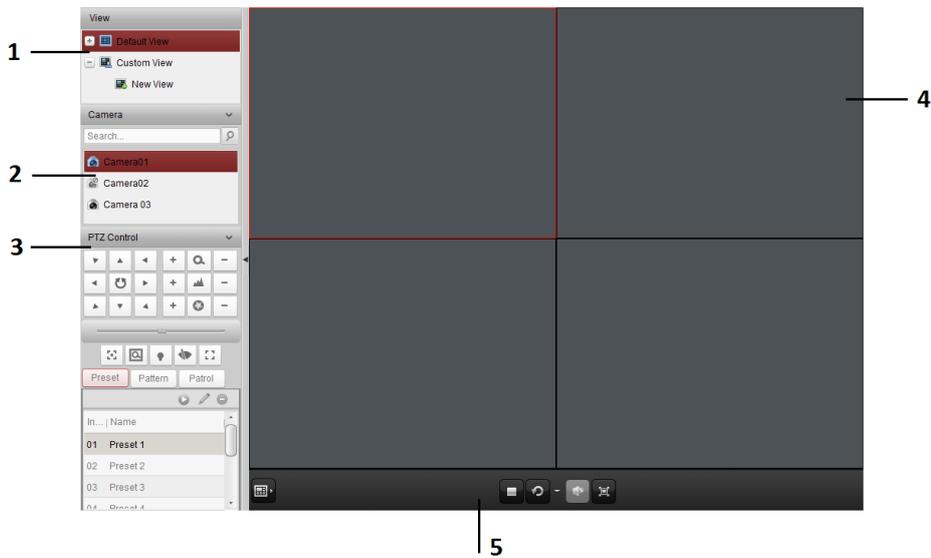
For the surveillance task, you can view the live video of the added network cameras and video encoders on the Main View page. And some basic operations are supported, including picture capturing, manual recording, PTZ control, etc.

Before you start:

A camera is required to be added for live view.

Click the **Main View** tab,

or click **View->Main View** to open the Main View page.



Main View Page

1 View List--Default View and Custom View

2 Camera List

3 PTZ Control Panel

4 Display Window of Live View

5 Live View Toolbar

Camera Status:



The camera is online and works properly.



The camera is in live view.



The camera is offline.

Live View Toolbar:



On the Main View page, the following toolbar buttons are available:



Set View

Set the screen layout mode and save the new settings for the current view; save the current view as another new view.

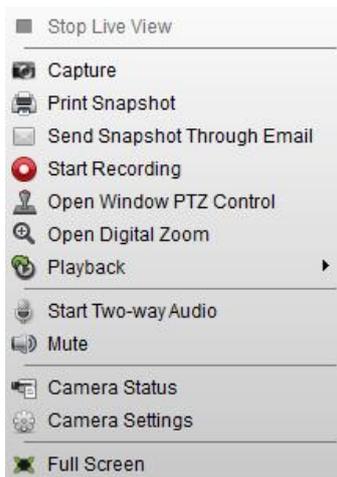


Stop Live View

Stop the live view of all cameras.

	Resume/Pause	Click to resume/pause the view auto-switch in live view.
	Auto-switch	
	Show/Hide the Menu	Show/Hide the config menu of auto-switch. Click again to hide it.
	Volume	Turn on/off the audio and adjust the audio volume.
	Full Screen	Display the live view in full screen. Press Esc to exit.

Right-click on the display window to open the Live View Management Menu:



The following buttons are available on the Live View Management Menu:

	Stop Live View	Stop the live view in the display window.
	Capture	Capture picture in the live view process.
	Print Snapshot	Capture the current picture and then print the picture.
	Send Snapshot Through Email	Capture the current picture and then send an Email notification to one or more receivers. The captured picture can be attached.
	Start/Stop Recording	Start/Stop the manual recording.
	Open Window PTZ Control	Enable PTZ control function on the display window. Click again to disable the function.
	Open Digital Zoom	Enable the digital zoom function. Click again to disable the function.
	Switch to Instant Playback	Switch to instant playback mode. The record files playback can be started from 30s, 1min, 3min, 5min, 8min or 10min before.
	Start/Stop Two-way Audio	Click to start the two-way audio function of the camera in live view.
	Audio On/Mute	Click to enable/disable the audio in live view.
	Camera Status	Display the status of the camera in live view, including the recording status, signal status, connection number, etc.
	Camera Settings	Configure the picture settings, encoding parameters, etc.
	Full Screen	Display the live view in full screen. Click the icon again to exit.

3.1 Starting and Stopping the Live View

Starting Live View for Cameras

Steps:

1. Open the Main View page.
2. Optionally, click the  icon in live view toolbar, then click the screen layout button  and select the screen layout mode for the live view.
3. Click-and-drag the camera on the list to the display window, or double-click the camera name after selecting the display window to start the live view.

Note: You can click-and-drag the video of the camera in live view to another display window if needed.

Starting Live View in Default View Mode

Purpose:

The video of the added cameras can be displayed in different view modes. 4 frequently-used default view modes are selectable: 1-Screen, 4-Screen, 9-Screen and 16-Screen.

Steps:

1. Open the Main View page.
2. Click the icon  to expand the default view list.
3. Click to select the default view mode, and the video of the added cameras will be displayed in a sequence on the screen.

Note: Right-click the current default view name on the list and click **Save View As.**, and you can save the default view as a custom view.

Starting Live View in Custom View Mode

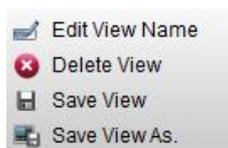
Purpose:

The view mode can also be customized for the video live view.

Steps:

1. Open the Main View page.
2. Click the icon  to expand the custom view list.
3. Click **New View** in the custom view list to create a new view.
4. Input the view name and click **Add**. The new view is of 4-Screen mode by default.
5. Optionally, Click the  icon in live view toolbar, then click the screen layout button  and select the screen layout mode for the new view.
6. Click-and-drag the camera to the display window, or double-click the camera name to start the live view in the created view.
7. Click the icon  to save the new view.

Right-click the custom view name on the list, and a menu pops up as follows:



The following buttons are available on the right-click menu:

- | | | |
|---|-----------------------|-----------------------------------|
|  | Edit View Name | Edit the name of the custom view. |
|  | Delete View | Delete the custom view. |

	Save View	Save the new settings of the custom view.
	Save View As.	Save the current view as another custom view.

Stopping the Live View

Steps:

1. Select the display window.
2. Click the icon  that appears in the upper-right corner when the mouse pointer is over the display window,
or click **Stop Live View** on the right-click menu to stop the live view of the display window.

You can also click the button  in live view toolbar to stop all the live view.

3.2 Auto-switch in Live View

2 types of auto-switch are supported: Single View Auto-switch in default view mode and Multi-view Auto-switch in custom view mode. The switching interval is selectable: 20s, 40s, 1min, 3min and 5min.

Single View Auto-switch

Purpose:

The video of all the cameras on the camera list will switch automatically in a selected default view in single view auto-switch.

Steps:

1. Open the Main View page.
2. Click the icon  in the toolbar and select the interval time for video switching.
3. Select a default view and click it to start the live view.
4. Click the icon  in the toolbar to start the video auto-switch. The icon  turns to .
5. To pause the video auto-switch, click the icon .

Multi-view Auto-switch

Purpose:

The custom views will switch automatically in multi-view auto-switch. Before proceeding, the custom views need to be added to the software.

Step:

1. Open the Main View page.
2. Click the icon  in the toolbar and select the interval time for view switching.
3. Click the icon  in the toolbar to start the custom view auto-switch. The icon  turns to .
4. To pause the custom view auto-switch, click the icon .

3.3 PTZ Control in Live View

Purpose:

The software provides PTZ control for cameras with pan/tilt/zoom functionality. You can set the preset, patrol and pattern for the cameras on the PTZ Control panel. And you can also open window PTZ

control for the operations of PTZ cameras.

Note: This section only describes the operations of PTZ control. To configure the parameters of PTZ control, see *Section 9.1.4 PTZ Control*.

Click the icon  to expand the PTZ Control panel.



The following buttons are available on the PTZ Control panel:

-  **Zoom**
-  **Focus**
-  **Iris**
-  **Auxiliary Focus**
-  **3D Positioning**
-  **Light**
-  **Wiper**
-  **Lens Initialization**

You can click  to start auto scanning; and you can also click the button , or use the mouse wheel to zoom in and out.

Configuring the Preset

A preset is a predefined image position which contains information of pan, tilt, focus and other parameters.

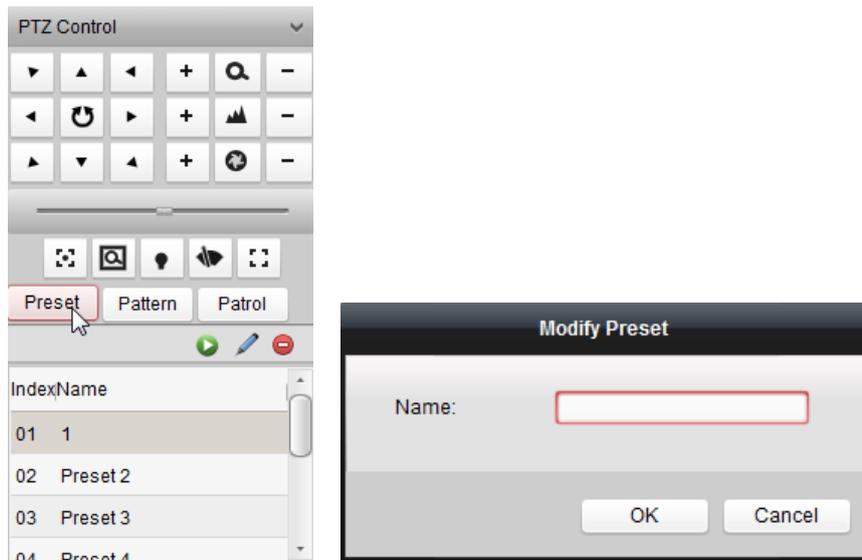
Perform the following steps to add a preset:

1. Click the **Preset** button to enter the PTZ preset configuration panel.
2. Click the direction buttons on the PTZ control panel to steer the camera to the desired view.
3. Select a PTZ preset number from the preset list and click the icon .
4. Input the name of the preset in the pop-up dialog box.
5. Click **OK** to save the settings.

To call a configured preset, double-click the preset, or select the preset and click the icon .

To modify a preset, select the preset, steer the camera to new view, and click the icon .

To delete a preset, select the preset from the list, and click the icon .



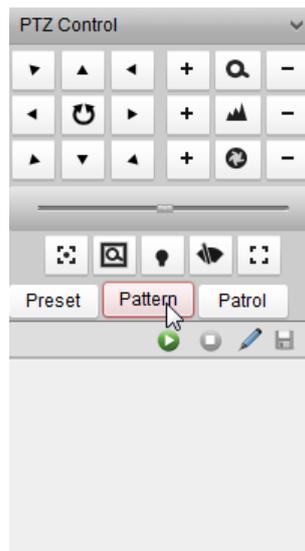
Configuring the Pattern

A pattern is a memorized, repeating series of pan, tilt, zoom, and preset functions.

Perform the following steps to add a pattern:

1. Click the **Pattern** button to enter the PTZ pattern configuration panel.
2. Click  to start recording of this pattern path.
3. Use the direction buttons to control the PTZ movement.
4. Click  to stop and save the pattern recording.
5. Click the icon  to call the pattern. To stop calling the pattern, click .

Note: Only one pattern can be configured, and the newly-defined pattern will overwrite the previous one.



Configuring the Patrol

A patrol is a scanning track specified by a group of user-defined presets, with the scanning speed between two presets and the dwell time at the preset separately programmable.

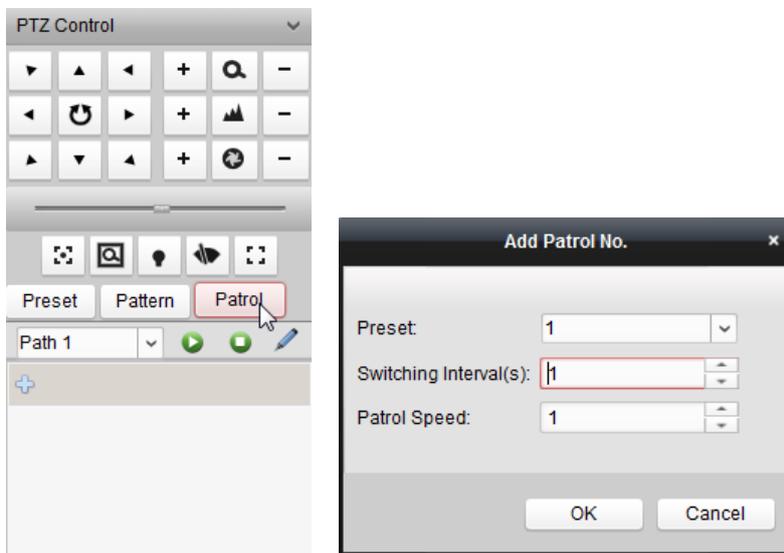
Before you start:

Two or more presets for one PTZ camera need to be added.

1. Click the **Patrol** button to enter the PTZ patrol configuration panel.
2. Select a track number from the drop-down list.
3. Click  to add a preset, and set the switching interval and patrol speed for the preset.
4. Repeat the above operation to add other presets to the patrol.
5. Optionally, you can click  or  to edit or delete the preset in the patrol path.
6. Click the icon  to call the patrol. To stop calling the patrol, click .

Notes:

- Up to 16 patrols can be configured.
- The switching interval can be set to 1~255 sec, and the patrol speed can be set to level 1~40.



3.4 Manual Recording and Capture

Toolbar in Each Display Window:



In each display window, the following toolbar buttons are available:

- | | | |
|---|-----------------------------------|---|
|  | Capture | Capture picture in the live view process. |
|  | Start/Stop Recording | Start/Stop the manual recording. |
|  | Switch to Instant Playback | Switch to the instant playback mode. |

Manual Recording in Live View

Manual Recording function allows you to record the live video on the Main View page manually. The record files are stored on the pre-allocated HDDs of PCNVR.

Steps:

1. Move the mouse pointer to the display window in live view to show the toolbar.
2. Click  in the toolbar of the display window or on the right-click Live View Management Menu to start recording. The icon  turns to .
3. Click the icon  to stop the manual recording.

Note: During the manual or schedule recording, an indicator  appears in the upper-right corner of the display window.

Capturing Picture in Live View

Steps:

1. Move the mouse pointer to the display window in live view to show the toolbar.
2. Click  in the toolbar of the display window or on the right-click Live View Management Menu. A small window of the captured picture will be displayed to notify whether the capturing operation is done or not.

Notes:

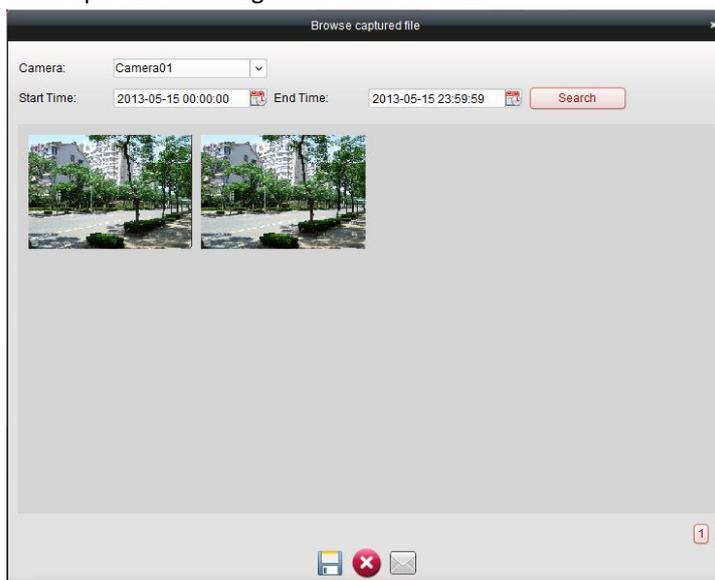
- If the picture is captured successfully, there will be a link to the saving path of the captured picture; and if not, there will be error messages accordingly.
- The saving path of the captured picture can be set on the System Configuration interface. For more details, see *Section 9.2.3 File Saving Path Settings*.

Viewing Captured Pictures

The pictures captured in live view are stored in the PC running the software. You can view the captured pictures if needed.

Steps:

1. Click **File->Open Captured Picture** to open the Captured Picture page.
2. Select the camera to search from the drop-down list.
3. Click the icon  to specify the start time and end time for search.
4. Click **Search**. The pictures captured between the start time and end time will be displayed. You can double-click the picture to enlarge it for a better view.



Select the captured picture, and click . You can save a new copy of the selected picture.

Select the captured picture, and click . You can delete the selected picture.

Select the captured picture, and click . You can send an Email notification with the selected picture attached.

3.5 Instant Playback

Purpose:

The record files can be played back instantly on the Main View page. Instant playback shows a passage of the video which was remarkable, or which was unclear on the first sight. Thus, you can get an immediate review if needed.

Before you start:

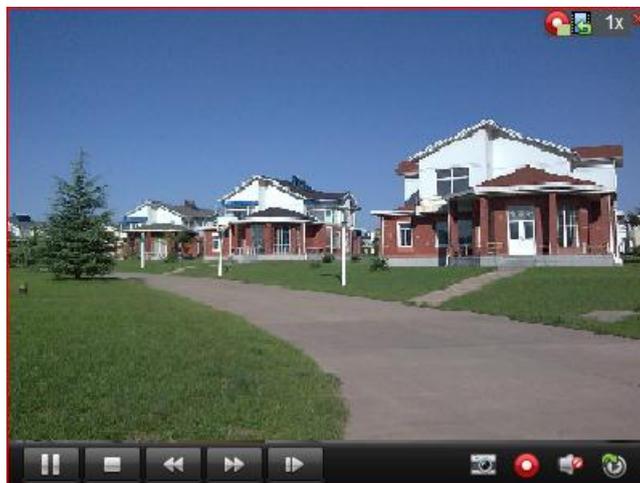
The video files need to be recorded on the pre-allocated HDDs of the PCNVR.

Steps:

1. Start the live view and move the mouse pointer to the display window to show the toolbar.
2. Click the icon  in the toolbar and a list of time periods pops up.
30s, 1 min, 3 min, 5 min, 8 min, and 10 min are selectable.
3. Select a time period to start the instant playback.
Example: If the current time of the live view is 09:30:00, and you select 3 min, then the instant playback will start from 09:27:00.
4. Click the icon  again to stop the instant playback and go back for the live view.

Notes:

- During the instant playback, an indicator  appears in the upper-right corner of the display window.
- The live view process will continue after the instant playback completed.



Right-click on the display window to open the Instant Playback Management Menu:



The following buttons are available on the right-click Instant Playback Management Menu:

		Pause/Start	Pause/Start the instant playback in the display window.
		Stop	Stop the instant playback and return to the live view mode.
		Speed Up/Down	Increase/Decrease the play speed of the instant playback.
		Single Frame	Play back the record file frame by frame.
		Capture	Capture the picture in the instant playback process.
		Start/Stop Recording	Start/Stop clipping the record files.
		Audio On/Mute	Click to turn on/off the audio in instant playback.
		Live View	Switch to live view mode.
		Full Screen	Display the instant playback in full screen. Click the icon again to exit.

3.6 Other Functions in Live View

There are some other functions supported in live view, including digital zoom, two-way audio, camera status and synchronization.

Auxiliary Screen Preview

The live video can be displayed on different auxiliary screens for the convenient preview of multiple monitoring scenes. Up to 3 auxiliary screens are supported.

Digital Zoom

Use the left key of mouse to drag a rectangle area in the lower-right/upper-left direction, and then the rectangle area will zoom in/out.

Two-way Audio

Two-way audio function enables the voice talk of the camera. You can get not only the live video but also the real-time audio from the camera. This two-way audio can be used for only one camera at one time.

Camera Status

The camera status, such as recording status, signal status, connection number, etc., can be detected and displayed for check. The status information refreshes every 10 seconds.

Camera Settings

The parameters of camera settings, including picture settings, encoding parameters, etc., can be configured.

Chapter 4 Playback

Purpose:

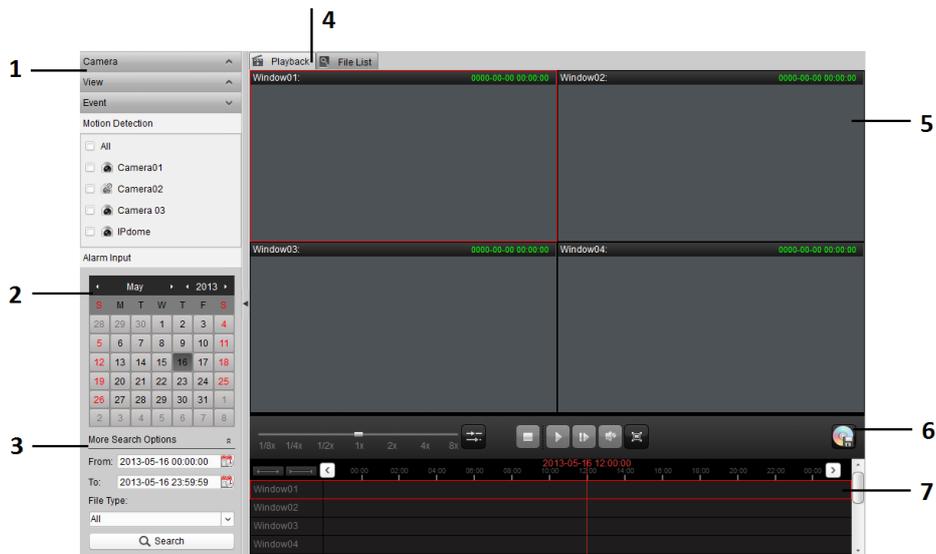
The record files stored on the pre-allocated HDDs of PCNVR can be searched and played back. Thus, you can get a review of the monitoring scenario.

Before you start:

The video of the cameras is required to be recorded for playback.

Click the **Playback** tab,

or click **View->Playback** to open the Playback page.



Playback Page

- 1 Camera List, View List, Event List
- 2 Calendar
- 3 Search Options
- 4 Playback Tab and File List Tab
- 5 Display Window of Playback
- 6 Playback Toolbar
- 7 Timeline

Right-click on the display window to open the Playback Management Menu:



The following buttons are available on the Playback Management Menu:

	Stop Playback	Stop the playback in the display window.
	Start/Stop Recording	Start/Stop clipping the record files.
	Capture	Capture picture in the playback process.
	Open Digital Zoom	Enable the digital zoom. Click again to disable the function.
--	Accurate Positioning	Play back the record files from an accurately specified time.
	Audio On/Mute	Click to turn on/off the audio in playback.
	Full Screen	Display the playback in full screen. Click the icon again to exit.

4.1 Normal Playback

Purpose:

The record files can be searched by the camera or the custom view for Normal Playback.

Searching Record Files for Normal Playback

Steps:

1. Open the Playback page.
2. Click  to expand the Camera List or View List on the left-side.
3. Select the cameras or views to be searched from the list.
4. Select the day for search on the calendar.

You can also click  to show more search options, click the icon  to specify the start time and end time, and select the file type for the search.

5. Click **Search**. The record files of selected cameras or views will be displayed on File List tab page.

You can check the information including the camera source, start time, end time, recording type, file size and status of the record files. Use the filter field to locate desired record files, or click on the headings to list the record files in the desired order.

Note: If there are record files for that camera in that day, on the calendar, the icon for that day is displayed as . Otherwise it is displayed as .

Index	Camera	Start Time	End Time	Recording Type	Play	Size	Status
<input type="checkbox"/>	1	Camera01	2013-05-16 09:39:53	2013-05-16 10:00:33	Time	 88.6 MB	Waiting
<input type="checkbox"/>	7	Camera 03	2013-05-16 09:39:53	2013-05-16 09:56:18	Time	 41.1 MB	Waiting
<input type="checkbox"/>	2	Camera01	2013-05-16 10:00:33	2013-05-16 10:58:24	Time	 249.1 MB	Waiting
<input type="checkbox"/>	3	Camera01	2013-05-16 10:58:24	2013-05-16 11:17:22	Time	 81.4 MB	Waiting
<input type="checkbox"/>	4	Camera01	2013-05-16 11:18:15	2013-05-16 11:47:24	Time	 43.0 MB	Waiting
<input type="checkbox"/>	8	Camera 03	2013-05-16 11:19:10	2013-05-16 11:47:15	Time	 46.4 MB	Waiting
<input type="checkbox"/>	5	Camera01	2013-05-16 11:50:46	2013-05-16 12:18:46	Time	 41.7 MB	Waiting
<input type="checkbox"/>	9	Camera 03	2013-05-16 11:50:46	2013-05-16 12:18:46	Time	 51.6 MB	Waiting
<input type="checkbox"/>	6	Camera01	2013-05-16 13:38:31	2013-05-16 14:20:43	Time	 61.1 MB	Waiting
<input type="checkbox"/>	10	Camera 03	2013-05-16 13:38:33	2013-05-16 14:20:43	Time	 69.5 MB	Waiting

Normal Playback

After searching the record files for the normal playback, you can play back the record files in the following two ways:

- **Playback by File List**

click the icon , or double-click the record file in the file list to display the video on the Playback tab page.

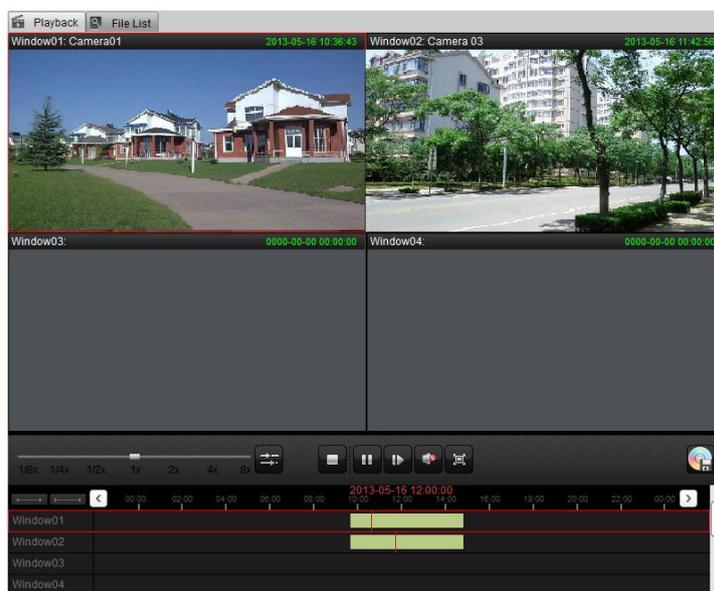
- **Playback by Timeline**

The timeline indicates the time duration for the record file, and the record files of different types are color coded. Click the **Playback** tab to go to the Playback tab page, and click on the timeline to play back the video from the specific time.

You can click  or  to scale up or scale down the timeline bar.

You can click  or  to go to the previous or the next time period.

You can use the mouse wheel to zoom in or zoom out on the timeline.



Normal Playback Toolbar:



On the Playback page, the following toolbar buttons are available:

		Async/Sync Playback	Click to play back the record files synchronously/asynchronously.
		Stop All	Stop the playback of all cameras.
		Pause/Play	Pause/Resume the playback of record files.
		Single Frame	Play back the record files frame by frame.
		Volume	Click to turn on/off the audio and adjust the audio volume.
		Full Screen	Display the video playback in full screen. Press Esc to exit..
		Backup	Download the video clips to the local PC for backup.

Note: You can move the slider on the Playback Speed Bar to set the playback speed.

4.2 Event Playback

Purpose:

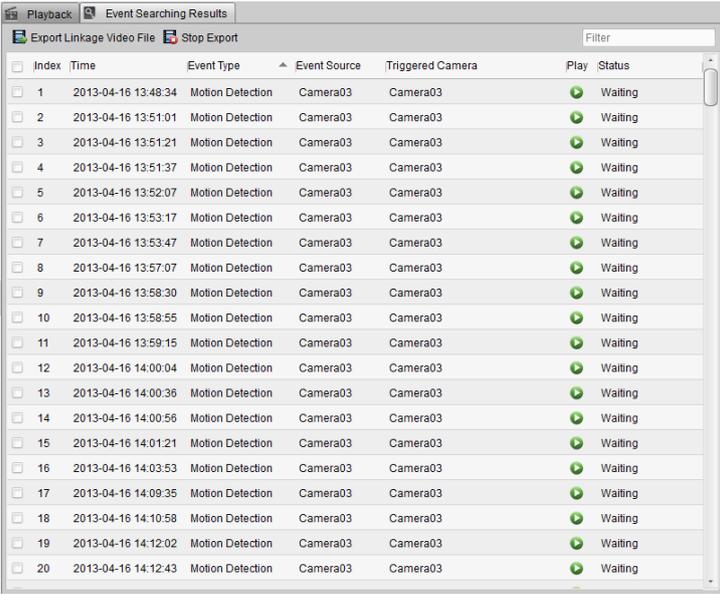
The recordings triggered by motion detection and alarm input can be searched for Event Playback.

Searching Record Files for Event Playback

Steps:

1. Open the Playback page.
2. Click  to expand the Event List on the left-side.
3. Click **Motion Detection** or **Alarm Input**, and select the cameras or alarm input sensors.
4. Select the day for search on the calendar.
You can also click  to show more search options, click the icon  to specify the start time and end time for the search.
5. Click **Search**. The recordings from the selected cameras and sensors triggered by motion detection or alarm input will be displayed on the File List tab page.

You can check the time, event type, event source and other information of the record files. Use the filter field to locate desired record files, or click on the headings to list the record files in the desired order.



Index	Time	Event Type	Event Source	Triggered Camera	Play	Status
1	2013-04-16 13:48:34	Motion Detection	Camera03	Camera03		Waiting
2	2013-04-16 13:51:01	Motion Detection	Camera03	Camera03		Waiting
3	2013-04-16 13:51:21	Motion Detection	Camera03	Camera03		Waiting
4	2013-04-16 13:51:37	Motion Detection	Camera03	Camera03		Waiting
5	2013-04-16 13:52:07	Motion Detection	Camera03	Camera03		Waiting
6	2013-04-16 13:53:17	Motion Detection	Camera03	Camera03		Waiting
7	2013-04-16 13:53:47	Motion Detection	Camera03	Camera03		Waiting
8	2013-04-16 13:57:07	Motion Detection	Camera03	Camera03		Waiting
9	2013-04-16 13:58:30	Motion Detection	Camera03	Camera03		Waiting
10	2013-04-16 13:58:55	Motion Detection	Camera03	Camera03		Waiting
11	2013-04-16 13:59:15	Motion Detection	Camera03	Camera03		Waiting
12	2013-04-16 14:00:04	Motion Detection	Camera03	Camera03		Waiting
13	2013-04-16 14:00:36	Motion Detection	Camera03	Camera03		Waiting
14	2013-04-16 14:00:56	Motion Detection	Camera03	Camera03		Waiting
15	2013-04-16 14:01:21	Motion Detection	Camera03	Camera03		Waiting
16	2013-04-16 14:03:53	Motion Detection	Camera03	Camera03		Waiting
17	2013-04-16 14:09:35	Motion Detection	Camera03	Camera03		Waiting
18	2013-04-16 14:10:58	Motion Detection	Camera03	Camera03		Waiting
19	2013-04-16 14:12:02	Motion Detection	Camera03	Camera03		Waiting
20	2013-04-16 14:12:43	Motion Detection	Camera03	Camera03		Waiting

Event Playback

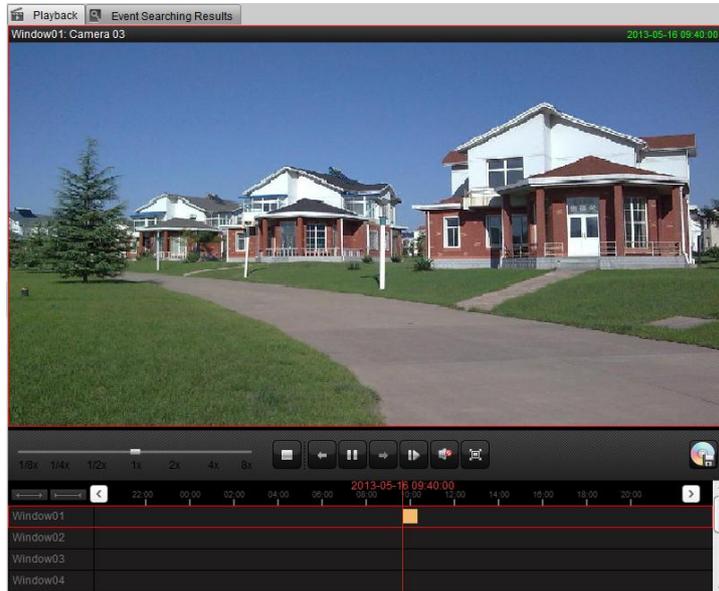
After searching the record files for the event playback, you can play back the record files in the following two ways:

- **Playback by File List**
click the icon , or double-click the record file in the file list to display the event linkage video on the Playback tab page.
- **Playback by Timeline**
The timeline indicates the time duration for the record file. Click the **Playback** tab to go to the Playback tab page, and click on the timeline to play back the video from the specific time.

You can click  or  to scale up or scale down the timeline bar.

You can click  or  to go to the previous or the next time period.

You can use the mouse wheel to zoom in or zoom out on the timeline.



Event Playback Toolbar:



On the Playback page, the following toolbar buttons are available:

	Stop Playback	Stop the event playback.
	Previous/Next Event	Go to the playback of the previous/next event.
	Pause/Play	Pause/Resume the playback of record files.
	Single Frame	Play back the record files frame by frame.
	Volume	Click to turn on/off the audio and adjust the audio volume.
	Full Screen	Display the playback of the video in full screen. Press Esc to exit.
	Backup	Download the video clips to the local PC for backup.

You can move the slider on the Playback Speed Bar to set the playback speed.

4.3 Synchronous Playback

Purpose:

In synchronous playback, the record files can be played back in synchronization.

Note: Record files from up to 16 cameras can be played back simultaneously.

Synchronous Playback for Some Searched Cameras

Steps:

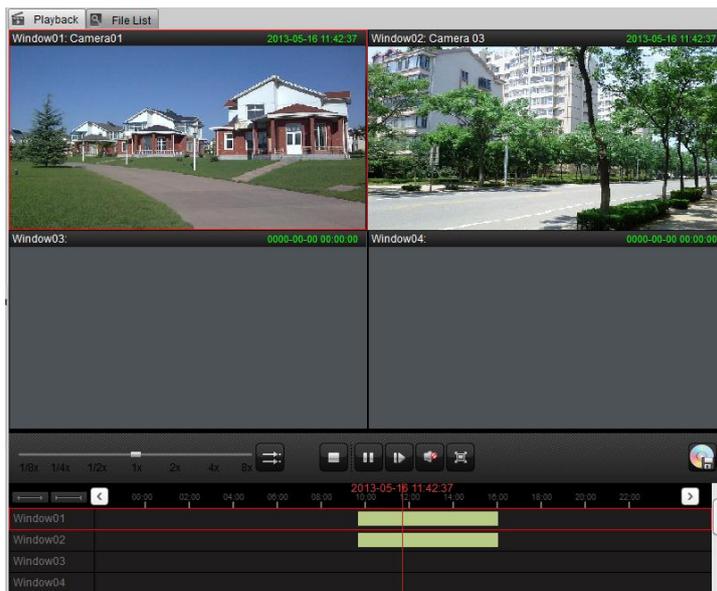
1. Start normal playback of the searched cameras.
2. Click  in the toolbar, and then the record files in normal playback will be played in sync. The icon  turns to .

- To disable the synchronous playback, click the icon .

Synchronous Playback for All Searched Cameras

Steps:

- Search the record files for the normal playback and Click **Playback** tab to go to Playback tab page.
- Click  in the toolbar to enable the synchronous playback. The icon  turns to .
- Click on a specific time point of the timeline to start the synchronous playback for all searched cameras.
- To disable the synchronous playback, click the icon .



4.4 Local Playback

Purpose:

The video files recorded on PCNVR can be exported to the local PC for backup. You can search and view the video clips in local playback.

Steps:

- Click **File->Open Video File** to open the player for video clips playback.
- Click the icon , and select file from the saving path of the video files for local playback.



The following buttons are available on the local playback page:

	CIF/4CIF	Display the video in cif/4cif resolution.
	Full Screen	Display the local playback page in full screen.
	Close	Close the local playback page.
	Pause/Play	Pause/Resume the playback of the record files.
	Stop	Stop the playback of the record files.
	Speed Down	Decrease the play speed of local playback.
	Speed Up	Increase the play speed of local playback.
	Single Frame	Play back the record files frame by frame.
	Digital Zoom	Enable the digital zoom function. Click again to disable it.
	Mute/Audio On	Turn off/on the audio in the local playback.
	Capture	Capture the picture in the local playback process.
	Open File	Select the file from local path for playback.

Chapter 5 Record Files Backup

Purpose:

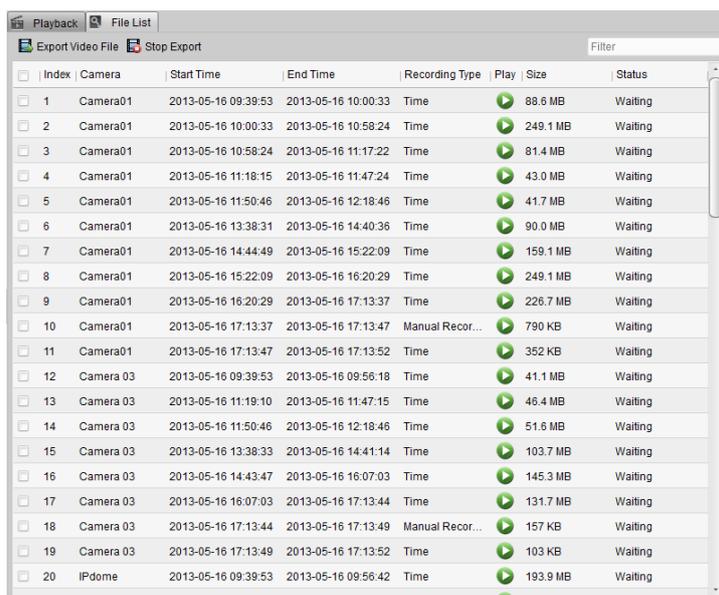
The video files recorded by PCNVR are stored on the pre-allocated HDDs of PC. And the video files can be exported for backup. The saving path of the exported video files can be set. For details, see *Section 9.2.3 File Saving Path Settings*.

Note: The backup video files will be saved to the default location if no specified saving path has been set. The default location is: `C:\ivms4200\video`.

5.1 Exporting Record Files

Steps:

1. Search the record files on the Playback page.
2. Check the checkboxes to select the record files for backup.
3. Click **Export Video File** to export the selected video files to the saving path you configured. The icon  turns to  in the downloading process, and the record file status changes from *Waiting* to *Download Completed* after the downloading process finished.



Index	Camera	Start Time	End Time	Recording Type	Play	Size	Status
1	Camera01	2013-05-16 09:39:53	2013-05-16 10:00:33	Time		88.6 MB	Waiting
2	Camera01	2013-05-16 10:00:33	2013-05-16 10:58:24	Time		249.1 MB	Waiting
3	Camera01	2013-05-16 10:58:24	2013-05-16 11:17:22	Time		81.4 MB	Waiting
4	Camera01	2013-05-16 11:18:15	2013-05-16 11:47:24	Time		43.0 MB	Waiting
5	Camera01	2013-05-16 11:50:46	2013-05-16 12:18:46	Time		41.7 MB	Waiting
6	Camera01	2013-05-16 13:38:31	2013-05-16 14:40:36	Time		90.0 MB	Waiting
7	Camera01	2013-05-16 14:44:49	2013-05-16 15:22:09	Time		159.1 MB	Waiting
8	Camera01	2013-05-16 15:22:09	2013-05-16 16:20:29	Time		249.1 MB	Waiting
9	Camera01	2013-05-16 16:20:29	2013-05-16 17:13:37	Time		226.7 MB	Waiting
10	Camera01	2013-05-16 17:13:37	2013-05-16 17:13:47	Manual Recor...		790 KB	Waiting
11	Camera01	2013-05-16 17:13:47	2013-05-16 17:13:52	Time		352 KB	Waiting
12	Camera 03	2013-05-16 09:39:53	2013-05-16 09:56:18	Time		41.1 MB	Waiting
13	Camera 03	2013-05-16 11:19:10	2013-05-16 11:47:15	Time		46.4 MB	Waiting
14	Camera 03	2013-05-16 11:50:46	2013-05-16 12:18:46	Time		51.6 MB	Waiting
15	Camera 03	2013-05-16 13:38:33	2013-05-16 14:41:14	Time		103.7 MB	Waiting
16	Camera 03	2013-05-16 14:43:47	2013-05-16 16:07:03	Time		145.3 MB	Waiting
17	Camera 03	2013-05-16 16:07:03	2013-05-16 17:13:44	Time		131.7 MB	Waiting
18	Camera 03	2013-05-16 17:13:44	2013-05-16 17:13:49	Manual Recor...		157 KB	Waiting
19	Camera 03	2013-05-16 17:13:49	2013-05-16 17:13:52	Time		103 KB	Waiting
20	IPdome	2013-05-16 09:39:53	2013-05-16 09:56:42	Time		193.9 MB	Waiting

5.2 Exporting Video Clips

Purpose:

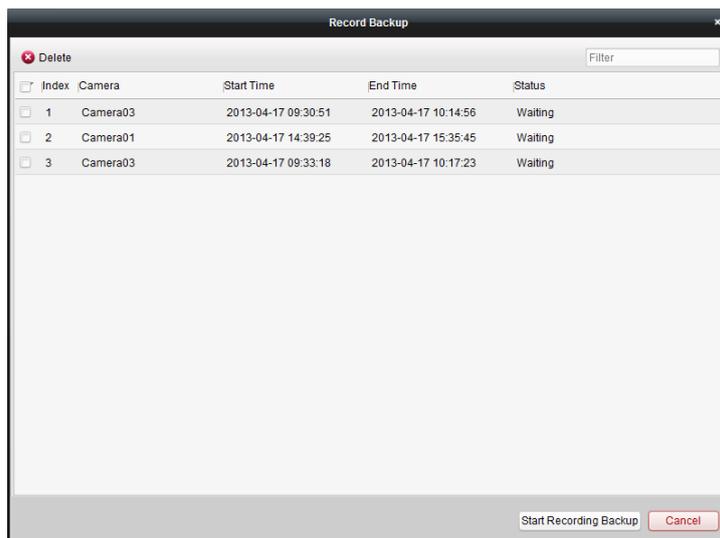
The recorded video files can be clipped and the video clips can also be exported for backup.

Exporting Video Clips by Timeline

Steps:

1. Start the normal playback or event playback.
2. Click-and-drag the mouse to select a segment video file on the timeline.

- Click  in the playback toolbar to enter the Recordings Backup interface. You can check the camera source, start time, end time and status of the video clips.
- Check the checkboxes to select the video clips for backup.
- Optionally, you can click **Delete** to delete the selected video clips and use the filter field to locate desired video clips.
- Click **Start Recording Backup** to download the selected video clips.
You can click **Stop Recording Backup** to stop downloading in the downloading process.
- The status of video clips changes from *Waiting* to *Download Completed* after the downloading process finished. Click **Cancel** to exit.



Exporting Video Clips by Manual Recording

Steps:

- Start the normal playback or event playback.
- Move the mouse pointer to the display window in playback to show the toolbar.
- Click  in the toolbar of the display window or on the right-click Playback Management Menu to start clipping. The icon  turns to .
- Click the icon  to stop clipping. A prompt box with the saving path of the video clips will pop up if all the operations succeed.



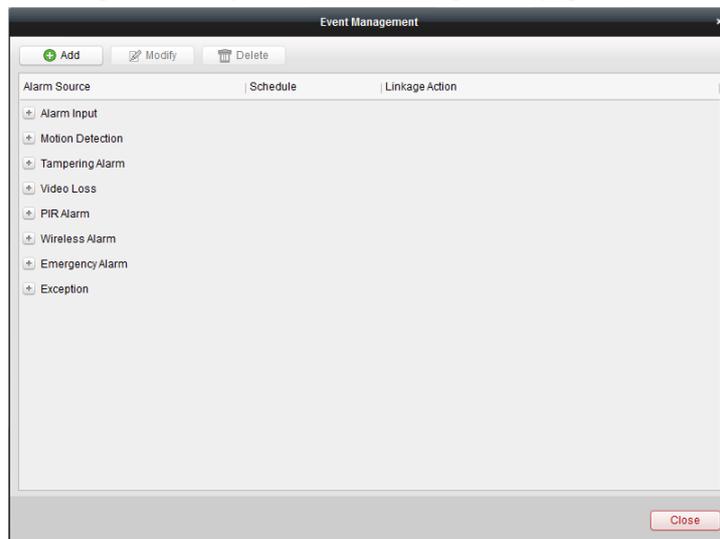
Chapter 6 Event Management and Alarm I/O Settings

Purpose:

In PCNVR, rules can be set up for triggers and linkage actions. You can assign linkage actions to the trigger by setting up a rule. For example, when motion is detected, an audible warning appears or other linkage actions happen.

Click the  icon on the Configuration panel,

or click **Tool->Event Management** to open the Event Management page.



You can set different linkage actions for the following triggers:

- Alarm Input
- Motion Detection
- Tampering Alarm
- PIR Alarm
- Video Loss
- PIR Alarm
- Wireless Alarm
- Emergency Alarm
- Exception

Different linkage actions can be set for the triggers:

Table 6.1 Descriptions of Linkage Actions

Linkage Actions	Descriptions
Audible Warning	The software gives an audible warning when alarm is triggered.
Notify Surveillance Center	Notify the surveillance center of the alarm information.
Upload Picture to FTP	Upload the alarm picture to the FTP.

Email Linkage	Send an Email notification to one or more receivers.
Alarm Output	Enable the alarm output function. Select the alarm output port and the external device connected to the port can be controlled.
Alarm Triggered Record	Start the recording of the selected cameras when alarm is triggered.
PTZ Linkage	Trigger a PTZ linkage action, including the preset, patrol or pattern.
Wireless Acousto-optic Alarm	Trigger the wireless acousto-optic alarm. (only available for PIR/Wireless/Emergency Alarm)

Select the event from the list and click **Modify/Delete**. Then you can add/delete the event source and its linkage actions.

6.1 Configuring Alarm I/O Settings

External devices such as smoke detectors and doorbells can be connected to the alarm inputs of cameras and used for triggering alarms or recordings. And an alarm output's main function is to trigger external devices such as an alarm siren, a door control relay, etc.

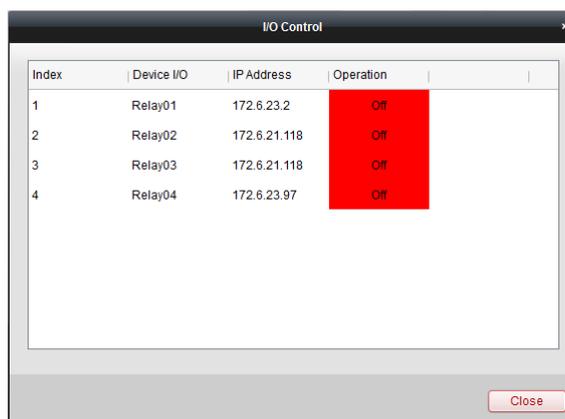
6.1.1 Manually Turning On/Off Alarm Output

Purpose:

Alarm output function can be enabled or disabled by turning on or off the corresponding alarm output channel manually.

Steps:

1. Click **Tool->I/O Control** to open the I/O Control page.
You can check the device output name, IP address and alarm output status on the list.
2. Click **Off/On** to turn on/off the alarm output channel manually.
3. Click **Close** to close the page.



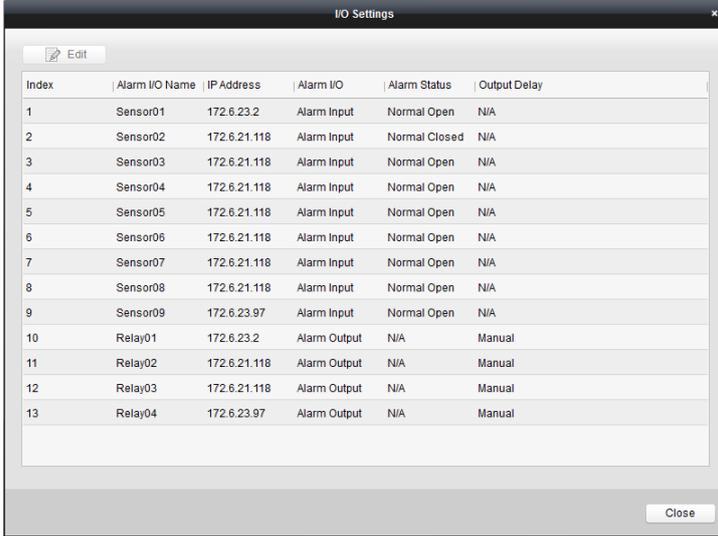
6.1.2 Configuring Alarm I/O Parameters

Purpose:

The alarm I/O parameters including input/output name, input status, output delay time, output schedule, etc., can be configured.

Click the  icon on the Configuration panel,

or click **Tool->I/O Settings** to open the I/O Settings Management page.



Index	Alarm I/O Name	IP Address	Alarm I/O	Alarm Status	Output Delay
1	Sensor01	172.6.23.2	Alarm Input	Normal Open	N/A
2	Sensor02	172.6.21.118	Alarm Input	Normal Closed	N/A
3	Sensor03	172.6.21.118	Alarm Input	Normal Open	N/A
4	Sensor04	172.6.21.118	Alarm Input	Normal Open	N/A
5	Sensor05	172.6.21.118	Alarm Input	Normal Open	N/A
6	Sensor06	172.6.21.118	Alarm Input	Normal Open	N/A
7	Sensor07	172.6.21.118	Alarm Input	Normal Open	N/A
8	Sensor08	172.6.21.118	Alarm Input	Normal Open	N/A
9	Sensor09	172.6.23.97	Alarm Input	Normal Open	N/A
10	Relay01	172.6.23.2	Alarm Output	N/A	Manual
11	Relay02	172.6.21.118	Alarm Output	N/A	Manual
12	Relay03	172.6.21.118	Alarm Output	N/A	Manual
13	Relay04	172.6.23.97	Alarm Output	N/A	Manual

Steps:

1. Select an alarm input/output channel and click **Edit**, or double-click the input/output channel to enter the Modify I/O Alarm interface.
2. Edit the alarm information if required.

Alarm Type: Alarm Input or Alarm Output.

IP Address: IP address of the alarm input/output device.

I/O Number: Alarm input/output No. of the channel.

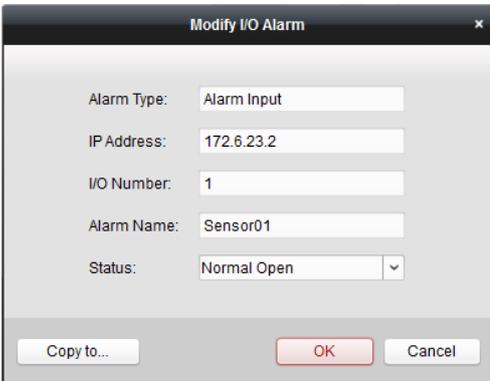
Alarm Name: Descriptive name of the alarm input/output. You can edit the name as you want.

Status: Set the status as **Normal Open** or **Normal Closed** according to the alarm input device.

Output Delay: Output delay time. You can select the delay time from the drop-down list.

Schedule: Arming schedule of alarm output. You can edit the template if needed.

3. Optionally, click **Copy to...** to copy the settings to other alarm input/output channels.
4. Click **OK** to save the settings.



Modify I/O Alarm

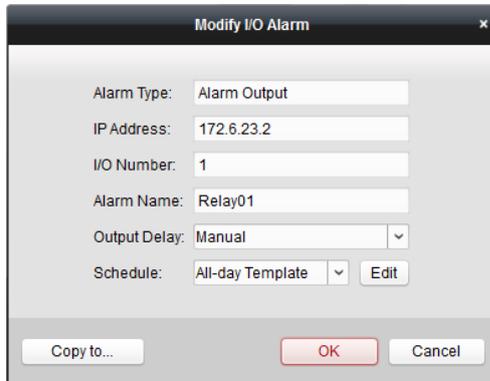
Alarm Type:

IP Address:

I/O Number:

Alarm Name:

Status:



Modify I/O Alarm

Alarm Type:

IP Address:

I/O Number:

Alarm Name:

Output Delay:

Schedule:

6.1.3 Configuring Alarm Input Linkage

Purpose:

When a device's alarm input port receives a signal from an external alarm device, such as smoke detector, doorbell, etc., the alarm input linkage actions are triggered for notification.

Steps:

1. Open the Event Management page and Click  to expand the alarm input list.
2. Select an alarm input channel and click **Modify**, or double-click the channel to enter the Modify Event interface.
3. Select the event source from the drop-down list if you want to change the current one.
4. Select the arming schedule template from the drop-down list.

All-day Template: for all-day continuous arming.

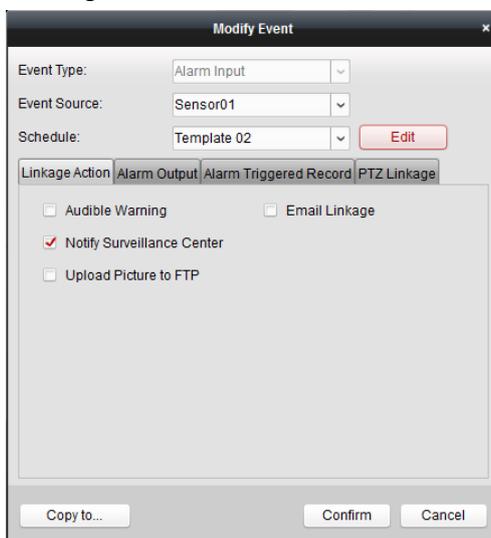
Weekday Template: for working-hours continuous arming from 8:00 AM to 8:00 PM.

Template 01-09: fixed templates for specific schedules. You can edit the templates if needed.

Custom: can be customized as desired.

If you need to edit or customize the template, click **Edit** to enter the Templates Management interface. For details, see *Configuring Arming Schedule Template*.

5. Check the checkboxes to activate the linkage actions. For details, see *Table 6.1 Descriptions of Linkage Actions*.
6. Optionally, click **Copy to...** to copy the alarm parameters to other channels.
7. Click **Confirm** to save the settings.



Configuring Arming Schedule Template

Perform the following steps to configure the arming schedule template to be applied:

If **Template 01-09** is selected, start from step 1;

If **Custom** is selected, start from step 2.

1. Click **Edit**. You can edit the template name.
2. Set the time schedule for the selected template.

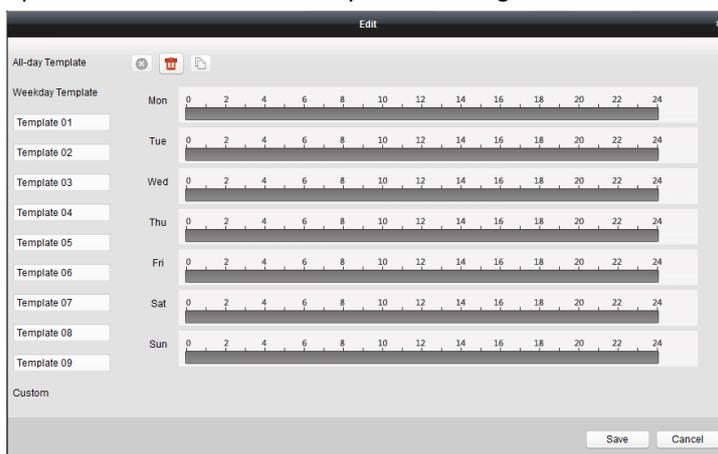
When the cursor turns to , you can edit the schedule time bar.

When the cursor turns to , you can move the selected time bar you just edited.

When the cursor turns to , you can lengthen or shorten the selected time bar.

- Optionally, you can select the schedule time bar, and then click the icon  to delete the selected time bar, or click the icon  to delete all the time bars, or click the icon  to copy the time bar settings to the other dates.
- Click **Save** to save the new settings.

Note: Up to 8 time periods can be set for each day in the arming schedule.



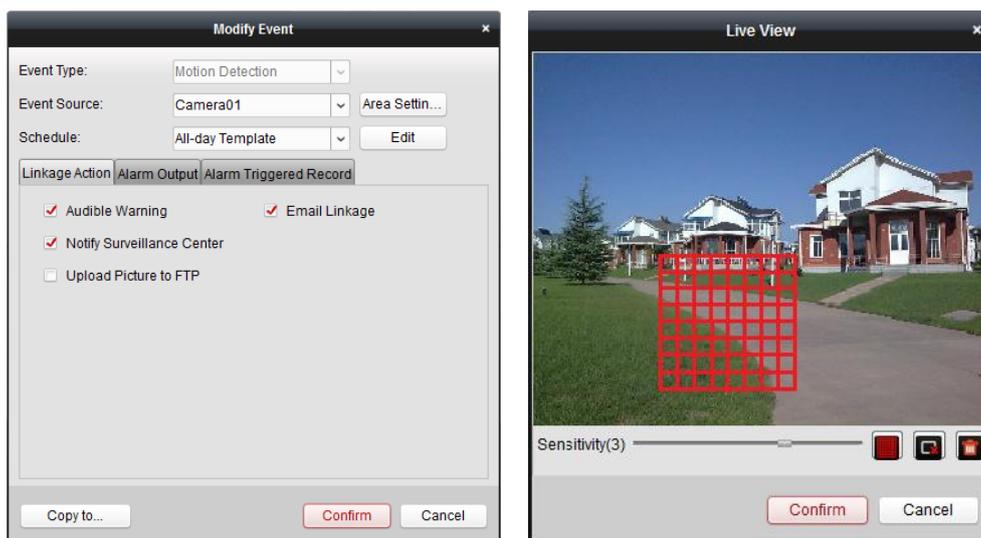
6.2 Configuring Motion Detection Alarm

Purpose:

A motion detection alarm is triggered when the software detects motion within its defined area. The linkage actions, such as alarm output, alarm triggered record, etc., can be set.

Steps:

- Open the Event Management page and Click  to expand the motion detection list.
- Select a motion detection channel and click **Modify**, or double-click the channel to enter the Modify Event interface.
- Select the event source from the drop-down list if you want to change the current one.
- Click **Area Settings** to open the Detection Area Settings page.
- Click-and-drag the mouse to draw a defined area for motion detection. You can click the icon  to set the whole video area as the detection area, click the icon  to delete the selected area, or click the icon  to clear all the detection areas.
- Drag the slider on the sensitivity bar to adjust the motion detection sensitivity. The larger the value is, the more sensitive the detection is.
- Select the arming schedule template from the drop-down list. If you need to edit or customize the template, click **Edit** to enter the Templates Management interface. For details, see *Configuring Arming Schedule Template*.
- Check the checkboxes to activate the linkage actions. For details, see *Table 6.1 Descriptions of Linkage Actions*.
- Optionally, click **Copy to...** to copy the event parameters to other channels.
- Click **Confirm** to save the settings.



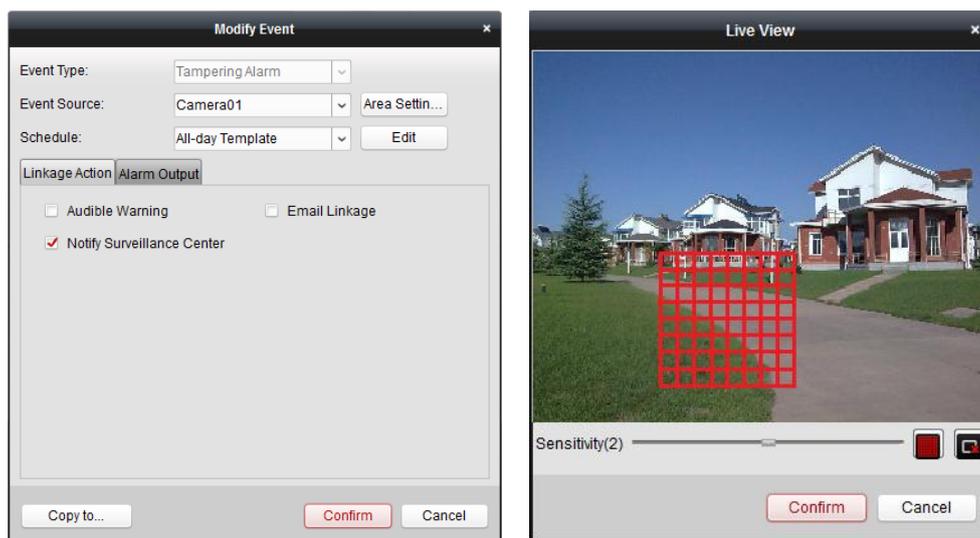
6.3 Configuring Tampering Alarm

Purpose:

A tampering alarm is triggered when the camera is covered and the monitoring area cannot be viewed. The linkage actions, such as alarm output, alarm triggered record, etc., can be set.

Steps:

1. Open the Event Management page and Click  to expand the tampering alarm list.
2. Select a tampering alarm channel and click **Modify**, or double-click the channel to enter the Modify Event interface.
3. Select the event source from the drop-down list if you want to change the current one.
4. Click **Area Settings** to open the Tamper-proof Area Settings page.
5. Click-and-drag the mouse to draw a defined area for tampering detection.
You can click the icon  to set the whole video area as the tamper-proof area, or click the icon  to delete the area.
6. Drag the slider on the sensitivity bar to adjust the tamper-proof sensitivity.
7. Select the arming schedule template from the drop-down list.
If you need to edit or customize the template, click **Edit** to enter the Templates Management interface. For details, see *Configuring Arming Schedule Template*.
8. Check the checkboxes to activate the linkage actions. For details, see *Table 6.1 Descriptions of Linkage Actions*.
9. Optionally, click **Copy to...** to copy the event parameters to other channels.
10. Click **Confirm** to save the settings.



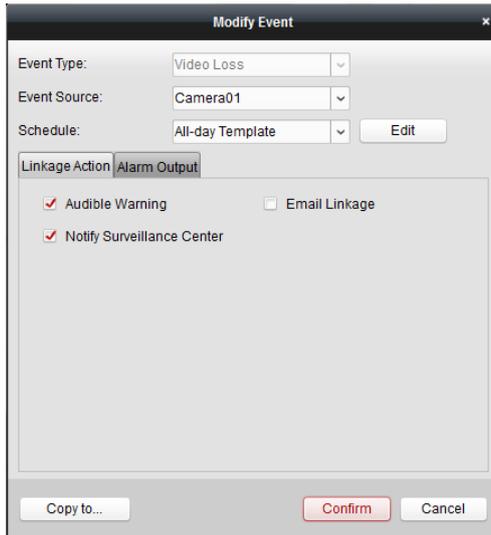
6.4 Configuring Video Loss Alarm

Purpose:

When PCNVR cannot receive video signal from the devices, the video loss alarm will be triggered. The linkage actions, such as alarm output, alarm triggered record, etc., can be set.

Steps:

1. Open the Event Management page and Click  to expand the video loss alarm list.
2. Select a video loss channel and click **Modify**, or double-click the channel to enter the Modify Event interface.
3. Select the event source from the drop-down list if you want to change the current one.
4. Select the arming schedule template from the drop-down list.
If you need to edit or customize the template, click **Edit** to enter the Templates Management interface. For details, see *Configuring Arming Schedule Template*.
5. Check the checkboxes to activate the linkage actions. For details, see *Table 6.1 Descriptions of Linkage Actions*.
6. Optionally, click **Copy to...** to copy the event parameters to other channels.
7. Click **Confirm** to save the settings.



6.5 Configuring PIR Alarm

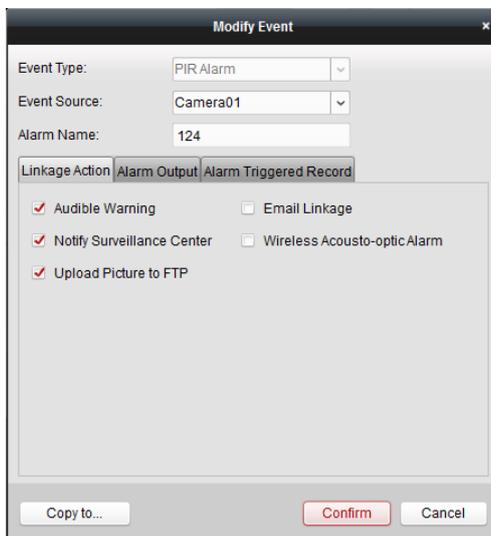
Purpose:

A PIR (Passive Infrared) alarm is triggered when an intruder moves within the detector's field of view. The heat energy dissipated by a person, or any other warm blooded creature such as dogs, cats, etc., can be detected.

Note: The PIR Alarm function requires the support of connected device.

Steps:

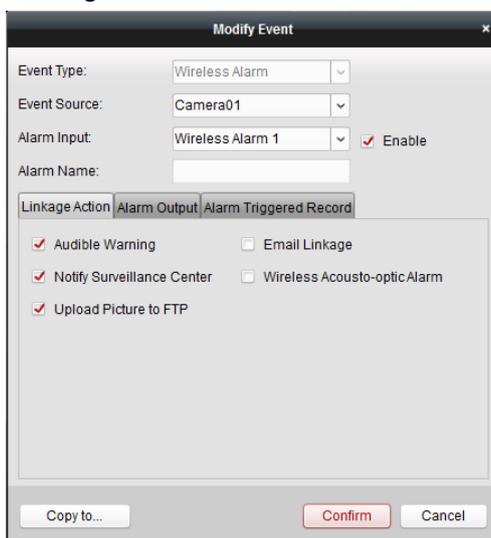
1. Open the Event Management page and Click  to expand the PIR alarm list.
2. Select a PIR alarm channel and click **Modify**, or double-click the channel to enter the Modify Event interface.
3. Select the event source from the drop-down list if you want to change the current one.
4. Input a descriptive name of the alarm.
5. Check the checkboxes to activate the linkage actions. For details, see *Table 6.1 Descriptions of Linkage Actions*.
6. Optionally, click **Copy to...** to copy the event parameters to other channels.
7. Click **Confirm** to save the settings.



6.6 Configuring Wireless Alarm

Steps:

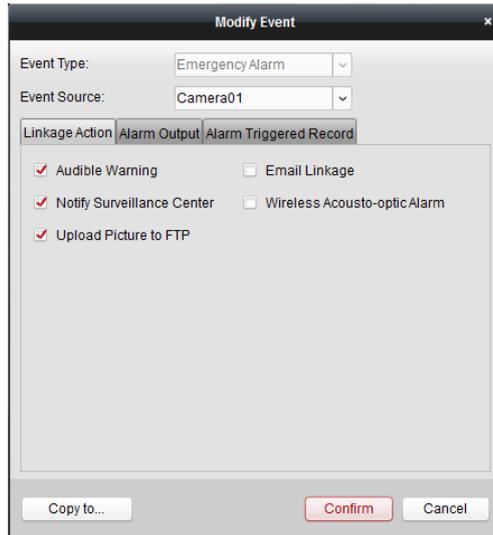
1. Open the Event Management page and Click  to expand the wireless alarm list.
2. Select a wireless alarm channel and click **Modify**, or double-click the channel to enter the Modify Event interface.
3. Select the event source from the drop-down list if you want to change the current one.
4. Check the checkbox **Enable** to enable the wireless alarm function.
5. Select the alarm input channel from the drop-down list.
6. Input a descriptive name of the alarm.
7. Check the checkboxes to activate the linkage actions. For details, see *Table 6.1 Descriptions of Linkage Actions*.
8. Optionally, click **Copy to...** to copy the event parameters to other channels.
9. Click **Confirm** to save the settings.



6.7 Configuring Emergency Alarm

Steps:

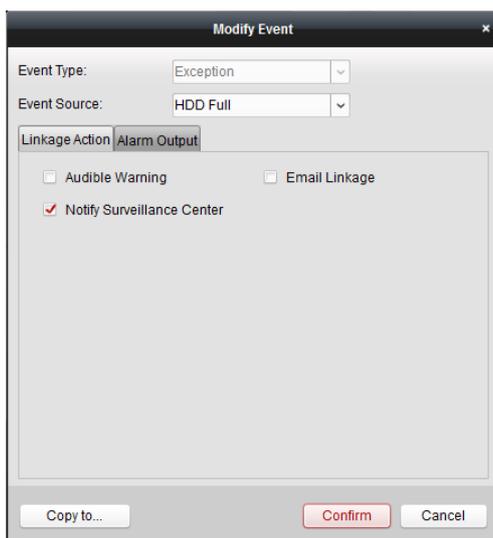
1. Open the Event Management page and Click  to expand the emergency alarm list.
2. Select an emergency alarm channel and click **Modify**, or double-click the channel to enter the Modify Event interface.
3. Select the event source from the drop-down list if you want to change the current one.
4. Check the checkboxes to activate the linkage actions. For details, see *Table 6.1 Descriptions of Linkage Actions*.
5. Optionally, click **Copy to...** to copy the event parameters to other channels.
6. Click **Confirm** to save the settings.



6.8 Configuring Exception Linkage

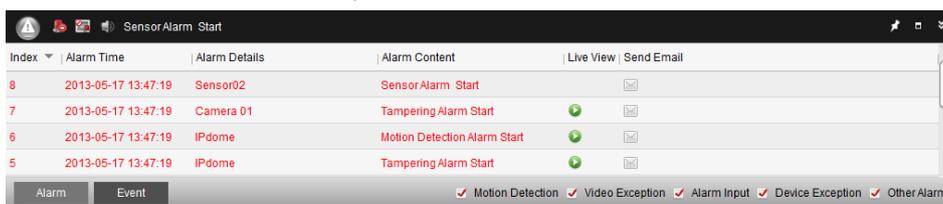
Steps:

1. Open the Event Management page and Click  to expand the exception list.
 - HDD Full:** The HDD is full.
 - HDD Exception:** Writing HDD error or unformatted HDD.
 - Network Disconnected:** The network is disconnected.
 - Illegal Login:** Incorrect user name or password.
 - Video Standard Mismatch:** The configured video input standard mismatches with the video output of the camera.
 - Video Exception:** The video signal is abnormal.
2. Select an exception type and click **Modify**, or double-click the exception type to enter the Modify Event interface.
3. Select the event source from the drop-down list if you want to change the current one.
4. Check the checkboxes to activate the linkage actions. For details, see *Table 6.1 Descriptions of Linkage Actions*.
5. Optionally, click **Copy to...** to copy the event parameters to other types of exceptions.
6. Click **Confirm** to save the settings.



6.9 Viewing Alarm and Event Information

The information of recent alarms and events can be displayed. Click the icon  in Alarms and Events Toolbar to show the Alarms and Events panel.



On the Alarms and Events panel, the following toolbar buttons are available:

- 
Clear Info Clear the information of alarms and events displayed in the list.
- 
Enable/Disable Alarm Click to enable/disable image pop-up when alarms occur.
- 
Triggered Pop-up Image
- 
Enable/Disable Audio Click to turn on/off the audio warning when alarms occur.
- 
Auto Hide/Lock Click to hide automatically/lock the Alarms and Events panel.
- 
Maximize Maximize the Alarms and Events panel in a new tab page.
- 
Show/Hide Click to show/hide the Alarms and Events panel.

Viewing Alarms Information

Different alarm types can be displayed on the panel: Motion Detection, Video Exception, Alarm Input, Device Exception and Other Alarm. You can check the checkbox to enable the displaying of that type alarm.

Before you start:

To display the alarms, the event parameters need to be configured.

Steps:

1. Click the **Alarm** tab.
2. Check the checkboxes of different alarm types.

3. When an alarm occurs, the icon  twinkles to call attention. The alarm information, including the time, details and content will be displayed.
Click  to get a live view of the alarm triggered camera.
Click  to send an Email notification of the alarm to one or more receivers.
4. Click the icon , and then the alarm picture will pop up when the events occur. To disable the function, click .
5. To clear the alarm information, click the icon , or right-click on an alarm log and then click **Clear**.

Viewing Events Information

The abnormal events of the software, such as the email sending failure, device disconnection, can also be displayed and viewed on the panel.

Steps:

1. Click the **Event** tab.
The event information, including the time and detailed description will be displayed.
2. To clear the event information, click the icon , or right-click on an event log and then click **Clear**.

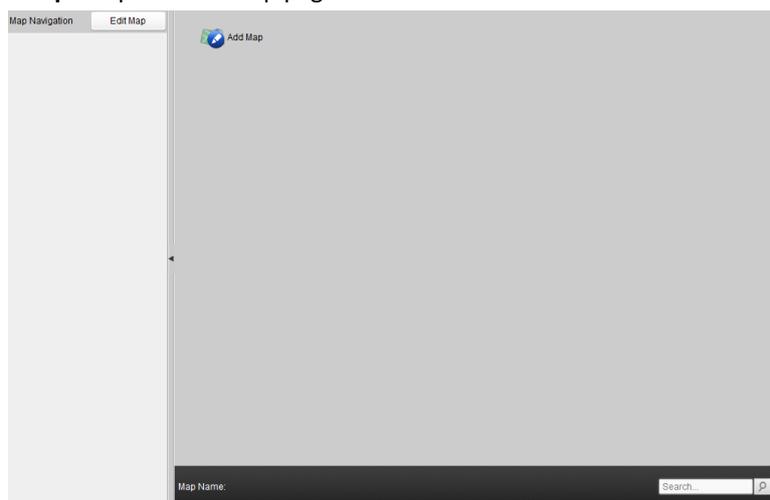
Chapter 7 E-map Management

Purpose:

The E-map function gives a visual overview of the locations and distributions of the installed cameras and alarm input devices. You can get the live view of the cameras on the map, and when alarm is triggered, you will get a notification message from the map.

Click the **E-map** tab,

or click **View->E-map** to open the E-map page.



7.1 Adding an E-map

Purpose:

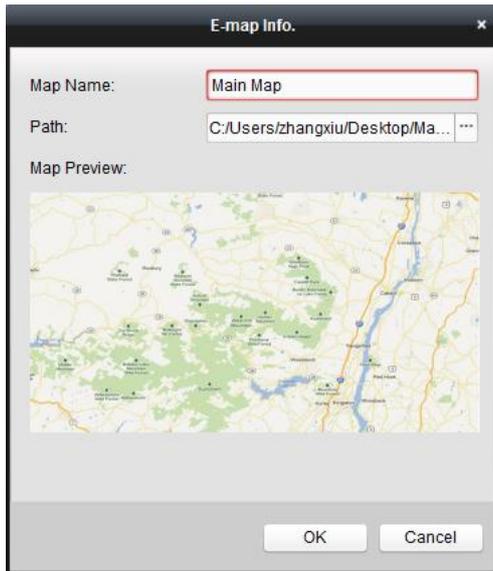
An E-map needs to be added as the main map for the hot spots and hot regions.

Steps:

1. Open the E-map page.
2. Click the icon  on the page to open the map adding dialog box.
3. Input a descriptive name of the added map as desired.
4. Click the icon  and select a map file from the local path. You can get a preview of the map.
5. Click **OK** to save the settings.

Notes:

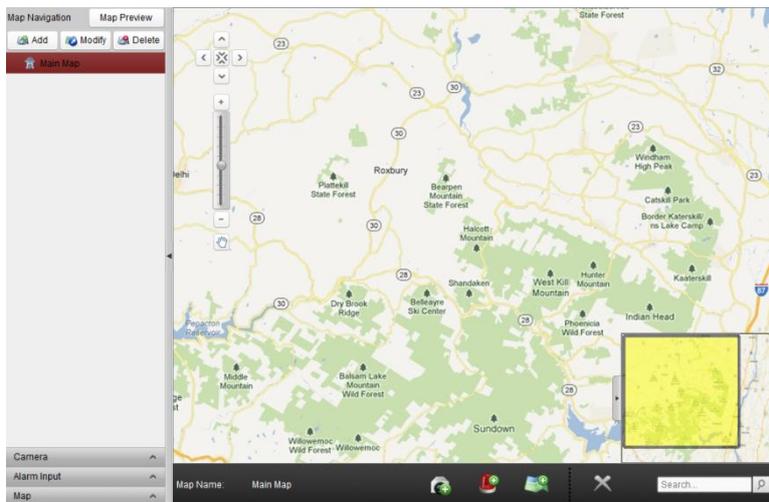
- Only one map can be added as the main map.
- The format of the map file can only be *.png, *.jpg or *.bmp.



The map added is displayed in the Map Display Area. Use the mouse wheel to zoom in or zoom out on the map. You can click-and-drag the yellow window in the lower-right corner or use the direction buttons and zoom bar to adjust the map area for view.

To modify the map information, click the **Modify** button in the Map Navigation Column.

To delete the map, click the **Delete** button in the Map Navigation Column.



Click the button **Edit Map** or **Map Preview** in Map Navigation Column to enter the map editing mode or map preview mode.

E-map Toolbar in Map Editing Mode:



E-map Toolbar in Map Preview Mode:



On the E-map page, the following toolbar buttons are available:

 **Add Camera** Add a camera as the hot spot on the map.

	Add Alarm Input	Add an alarm input sensor as the hot spot on the map.
	Add Hot Region	Add a sub-map as the hot region on the main map.
	Delete	Remove the hot spots or hot regions from the map.
	Previous	Go to the previous map.
	Next	Go to the next map.
	Clear Alarm Info.	Clear the alarm information displayed on the map.

7.2 The Hot Spot Function

Purpose:

The cameras and alarm inputs can be added on the map and are called the hot spots. The hot spots show the locations of the cameras and alarm inputs, and you can also get the live view and alarm information of the surveillance scenarios through the hot spots.

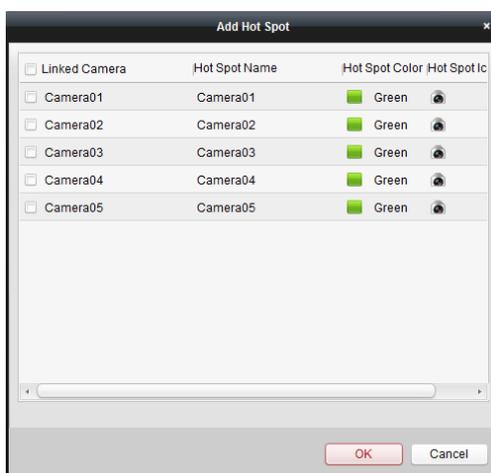
7.2.1 Adding Hot Spots

Adding Cameras as Hot Spots

Steps:

1. Click the **Edit Map** button in the Map Navigation Column to enter the map editing mode.
2. Click the icon  in the toolbar to open the Add Hot Spot dialog box.
3. Check the checkboxes to select the cameras to be added.
4. Optionally, you can edit hot spot name, select the name color and select the hot spot icon.
5. Click **OK** to save the settings. The camera icons are added on the map as hot spots and the icons of the added cameras changes from  to  in the camera list. You can click-and-drag the camera icons to move the hot spots to the desired locations.

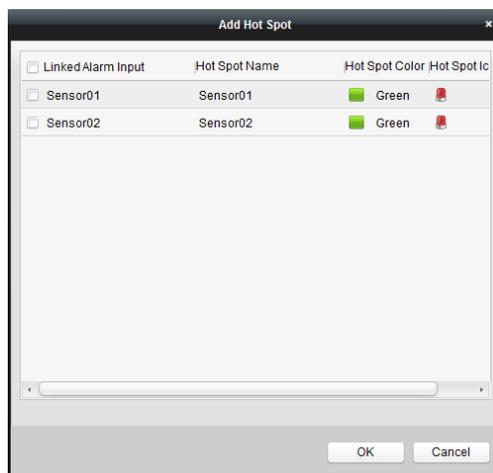
You can also click-and-drag the camera icons from the camera list to the map directly to add the hot spot.



Adding Alarm Inputs as Hot Spots

Steps:

1. Click the **Edit Map** button to enter the map editing mode.
2. Click the icon  in the toolbar to open the Add Hot Spot dialog box.
3. Check the checkboxes to select the alarm inputs to be added.
4. Optionally, you can edit hot spot name, select the name color and select the hot spot icon.
5. Click **OK** to save the settings. The alarm input icons are added on the map as hot spots and the icons of the added alarm inputs changes from  to  in the alarm input list. You can click-and-drag the alarm input icons to move the hot spots to the desired locations.
You can also click-and-drag the alarm input icons from the alarm input list to the map directly to add the hot spot.



7.2.2 Modifying Hot Spots

Purpose:

You can modify the information of the added hot spots on the map, including the name, the color, the icon, etc.

Steps:

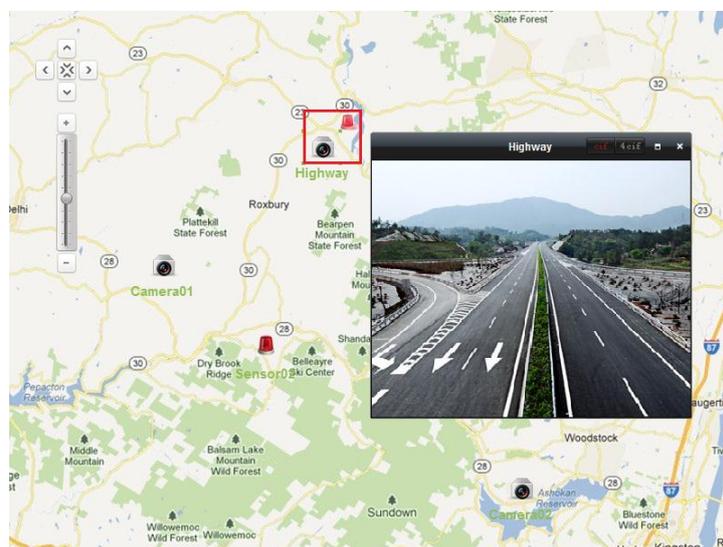
1. Click the **Edit Map** button to enter the map editing mode.
2. Select the hot spot icon on the map to show the hot spot modifying page.
3. You can edit the hot spot name in the text field and select the color, the icon and the linked camera or alarm input from the drop-down list.
4. Optionally, you can click the icon  on the right side of Map Display Area to hide/show the hot spot modifying page.
5. To delete the hot spot, select the hot spot icon and click  in the toolbar; or right-click the hot spot icon and click **Delete**.



7.2.3 Previewing Hot Spots

Steps:

1. Click the **Map Preview** button in the Map Navigation Column to enter the map preview mode.
2. Double-click the camera hot spots, and you can get the live view of the cameras.
3. If there is any alarm triggered, the icon  will appear and twinkle near the hot spot. Click the alarm icon, and then you can check the alarm information, including alarm type and triggering time. You can click the icon  in the toolbar to clear the alarm information.



7.3 The Hot Region Function

Purpose:

The hot region function links a map to another map. When you add a map to the main map as a hot region, an icon of the link to the added map is shown on the main map. The added map is called child

map while the main map to which you add the hot region is the parent map.

Before you start:

The main map needs to be added as the parent map before you add any sub-maps.

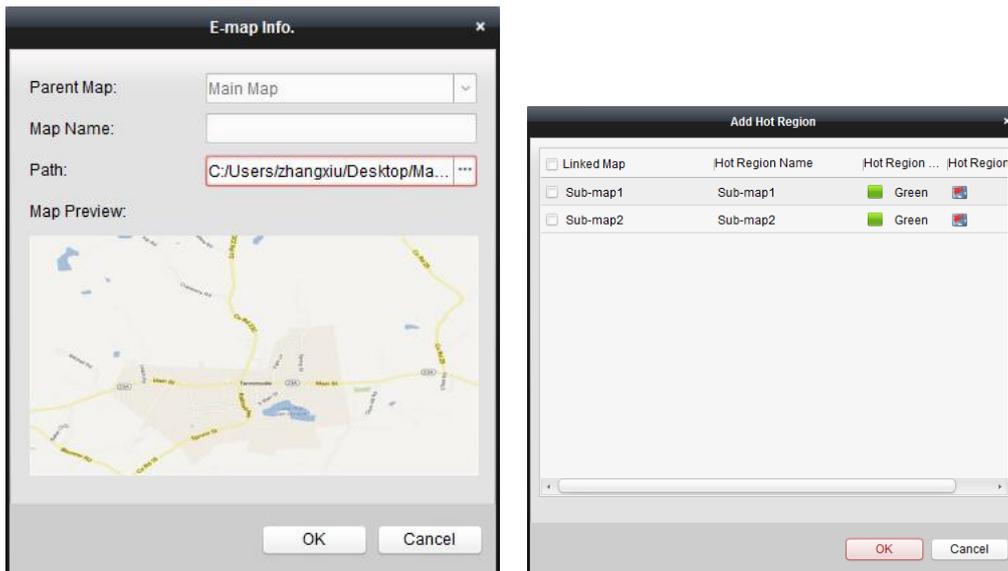
7.3.1 Adding Hot Regions

Steps:

1. Click the **Edit Map** button to enter the map editing mode.
2. Click the **Add** button in the Map Navigation Column to add the sub-maps.
3. Select the main map name on the list and click the icon  in the toolbar to open the Add Hot Region dialog box.
4. Check the checkboxes to select the sub-maps to be linked.
5. Optionally, you can edit the hot region name, and select the hot region color and icon.
6. Click **OK** to save the settings. The sub-map icons are added on the main map as the hot regions. Click-and-drag the sub-map icons to move the hot regions to the desired locations.

You can also click-and-drag the sub-map icons from the map list to the main map directly to add the hot region.

Note: Up to 16 sub-maps can be added under the main map.



7.3.2 Modifying Hot Regions

Purpose:

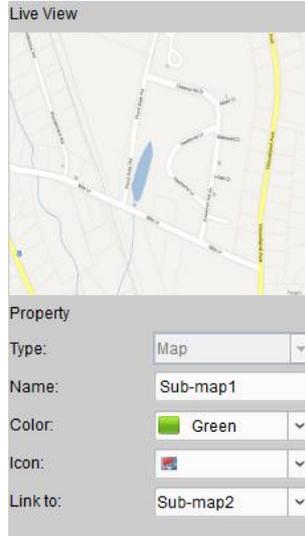
You can modify the information of the hot regions on the main map, including the name, the color, the icon, etc.

Steps:

1. Click the **Edit Map** button to enter the map editing mode.
2. Select the hot region icon on the main map to show the hot region modifying page.
3. You can edit the hot region name in the text field and select the color, the icon and the linked

sub-map from the drop-down list.

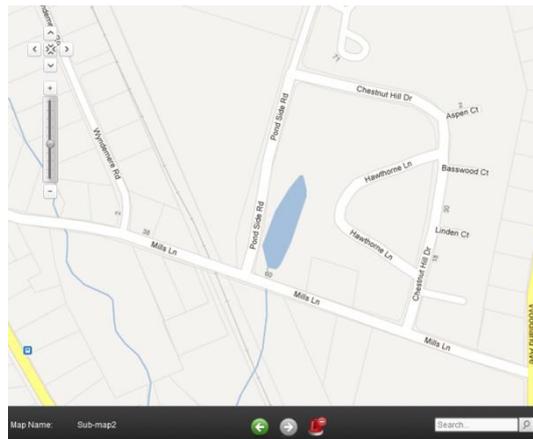
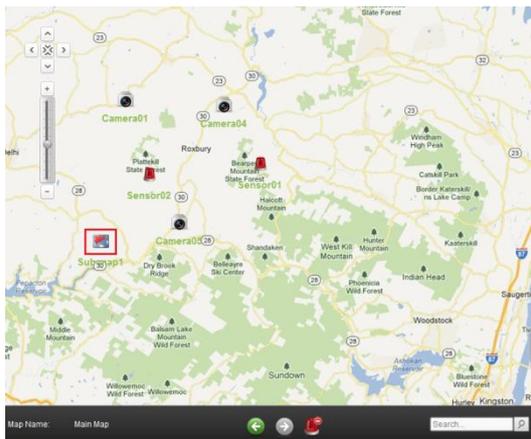
4. Optionally, you can click the icon  on the right side of Map Display Area to hide/show the hot region modifying page.
5. To delete the hot region, select the hot region icon and click  in the toolbar; or right-click the hot spot icon and click **Delete**.



7.3.3 Previewing Hot Regions

Steps:

1. Click the **Map Preview** button to enter the map preview mode.
2. Double-click the hot region icon to enter the linked sub-map.
3. The hot spots can also be added on the hot regions.
4. You can click the icon  in the toolbar to go the previous/next map.

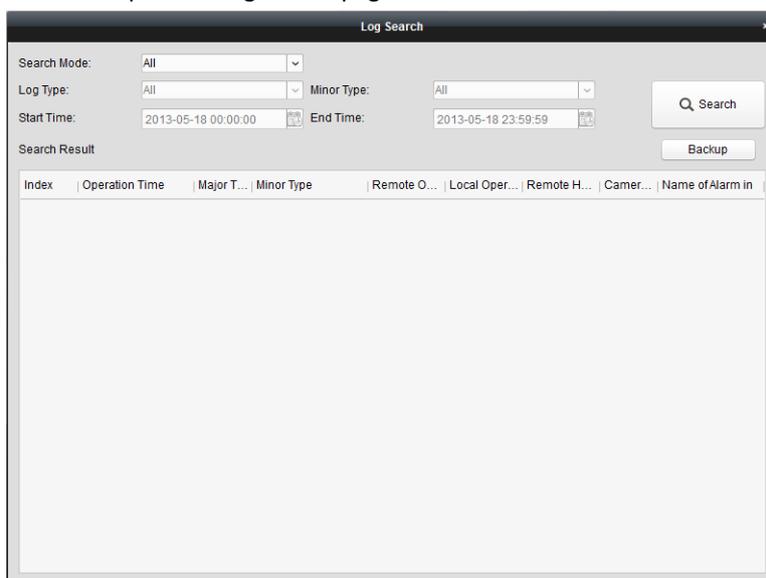


Chapter 8 Log Management

Purpose:

The log files record the activities of PCNVR and can be searched by different ways. You can view the detailed information of the activities, such as the operation time, the type, the local operator, etc. And you can also export the log files to local PC for backup if needed.

Click **Tool->Log Search** to open the Log Search page.



8.1 Searching Log Files

There are 4 types of search modes supported: All, By Type, By time and By Type&Time.

Searching All Log Files

Steps:

1. Select All from the drop-down list as the search mode.
2. Click **Search**. All the log files of PCNVR will be displayed on the list.

Searching Log Files By Type

Steps:

1. Select By Type from the drop-down list as the search mode.
2. Select the log type for search. 5 log types are selectable: All, Alarm, Exception, Operation and Information.
3. Select the minor type of the logs to narrow the search range.
4. Click **Search**. The log files of the selected types will be displayed on the list.

Searching Log Files By Time

1. Select By Time from the drop-down list as the search mode.

2. Click the icon  to specify the start time and end time for search.
3. Click **Search**. The log files of which the operation time is between the start time and end time will be displayed on the list.

Searching Log Files By Type&Time

1. Select By Type&Time from the drop-down list as the search mode.
2. Select the log type and minor type.
3. Click the icon  to specify the start time and end time for search.
4. Click **Search**. The search results will be displayed on the list.

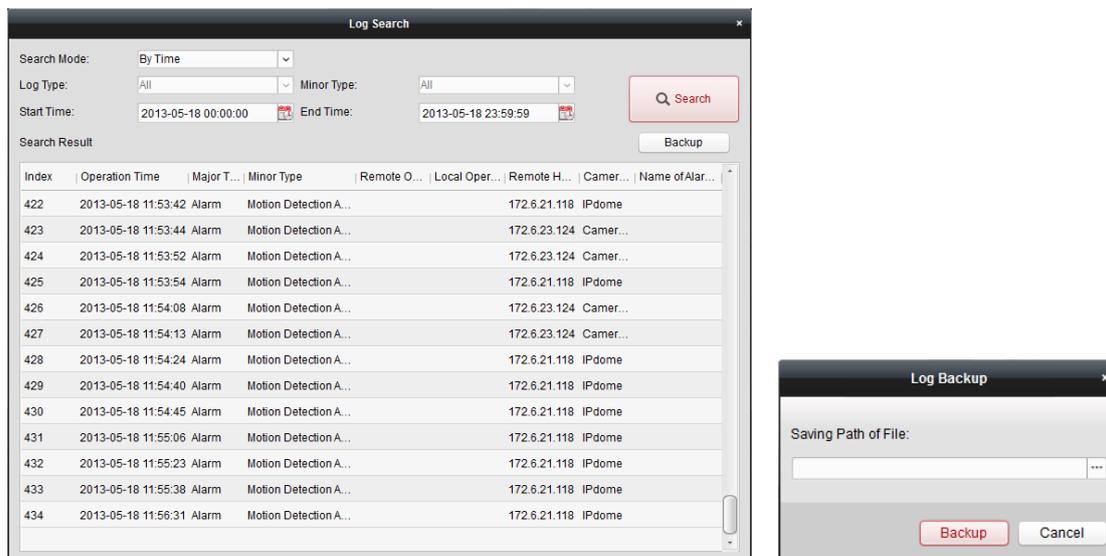
8.2 Exporting Log Files for Backup

Before you start:

Search out the log files for backup.

Steps:

1. Select the log file from the list.
2. Click **Backup** to open the Log Backup dialog box.
3. Click the icon  and select a local saving path for log file backup.
4. Click **Backup** to start the backup process.



8.3 Viewing Log File Backup

Purpose:

The log files exported for backup are stored on the local PC, and you can view the detailed information of the logs.

Steps:

1. Click **File->Open Log File** to open the Log File page.
2. Click the icon  to select the log file backup from the local PC. And then the information of the

logs, such as operation time, type, operator, etc., will be displayed on the list.

Index	Operation Time	Major Type	Minor Type	Remote O...	Local Oper...	Remote H...	Camer...	Name of Alar...
1	2013-05-18 10:48:...	Operation	Turn On					
2	2013-05-18 10:48:...	Operation	Local Login	admin				
3	2013-05-18 10:48:...	Alarm	Motion Detection A...			172.6.23.124	Camer...	
4	2013-05-18 10:48:...	Alarm	IP Channel Alarm I...			172.6.21.118	IPdome	Sensor02
5	2013-05-18 10:48:...	Alarm	Video Tampering ...			172.6.21.118	IPdome	
6	2013-05-18 10:48:...	Inform...	Start Recording				Camer...	
7	2013-05-18 10:48:...	Inform...	Start Recording				IPdome	
8	2013-05-18 10:48:...	Inform...	Start Recording				Camer...	
9	2013-05-18 10:48:...	Inform...	Start Recording				Camer...	
10	2013-05-18 10:48:...	Alarm	Motion Detection A...			172.6.21.118	IPdome	
11	2013-05-18 10:48:...	Alarm	Motion Detection A...			172.6.23.97	Camer...	
12	2013-05-18 10:48:...	Alarm	Motion Detection A...			172.6.21.118	IPdome	
13	2013-05-18 10:48:...	Alarm	Motion Detection A...			172.6.21.118	IPdome	
14	2013-05-18 10:49:...	Alarm	Motion Detection A...			172.6.21.118	IPdome	
15	2013-05-18 10:49:...	Alarm	Motion Detection A...			172.6.23.97	Camer...	
16	2013-05-18 10:49:...	Alarm	Motion Detection A...			172.6.23.97	Camer...	
17	2013-05-18 10:49:...	Alarm	Motion Detection A...			172.6.21.118	IPdome	

Chapter 9 Camera Settings and System Configuration

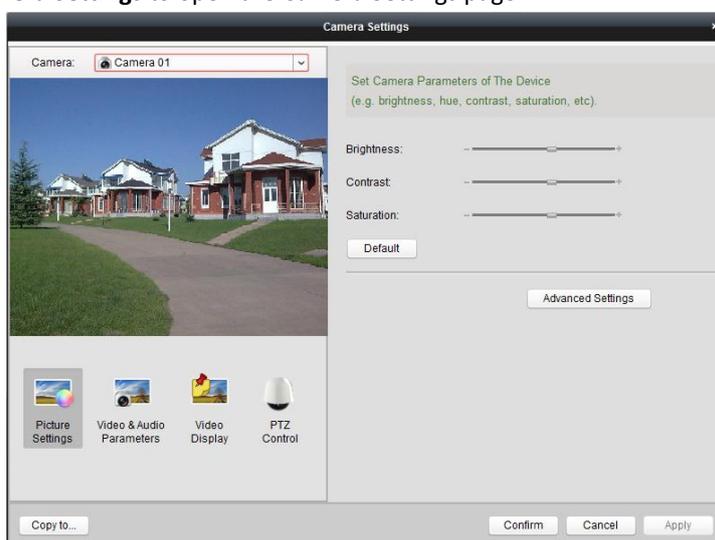
9.1 Camera Settings

Purpose:

The picture settings, encoding parameters, on screen display(OSD) settings, PTZ control parameters, etc., can be configured.

Click the  icon on the Configuration panel,

or click **Tool->Camera Settings** to open the Camera Settings page.



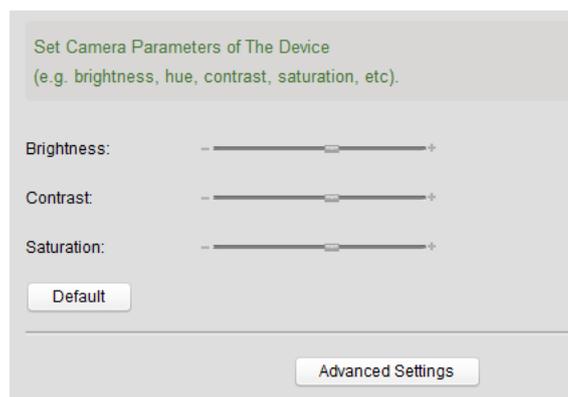
9.1.1 Picture Settings

Purpose:

The picture parameters, such as brightness, contrast, saturation, etc., can be configured to acquire high image quality for better view.

Steps:

1. Open the Camera Settings page and click  to enter the Picture Settings interface.
2. Select the camera from the drop-down list on the left-side of the page.
3. Move the slider on the parameter bar to adjust the value of the parameter.
4. Click **Default**, and you can restore the default values of the parameters.
5. Click **Advanced Settings**, and you can configure more picture parameters.
6. Click **Confirm** to save the settings.



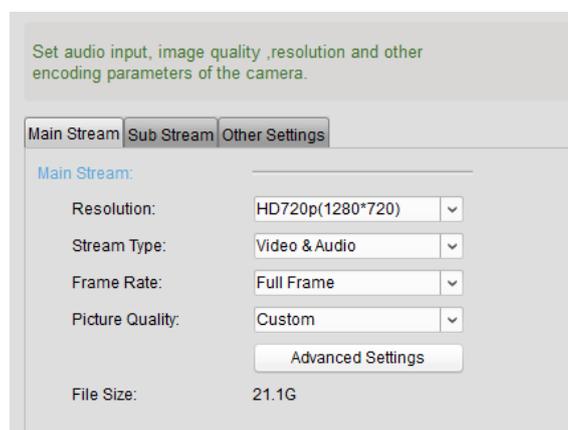
9.1.2 Video&Audio Parameters

Purpose:

You can configure the encoding parameters of main stream and sub-stream, and other settings of the camera.

Steps:

1. Open the Camera Settings page and click  to enter the Video&Audio Parameters interface.
2. Select the camera from the drop-down list on the left-side of the page.
3. Click the **Main Stream/Sub Stream** tab, and you can configure the encoding parameters, such as the resolution, stream type, frame rate, picture quality, etc.
Click the **Other Settings** tab, and you can set the alarm input type and adjust the audio volume.
4. Click **Confirm** to save the settings.



9.1.3 Video Display

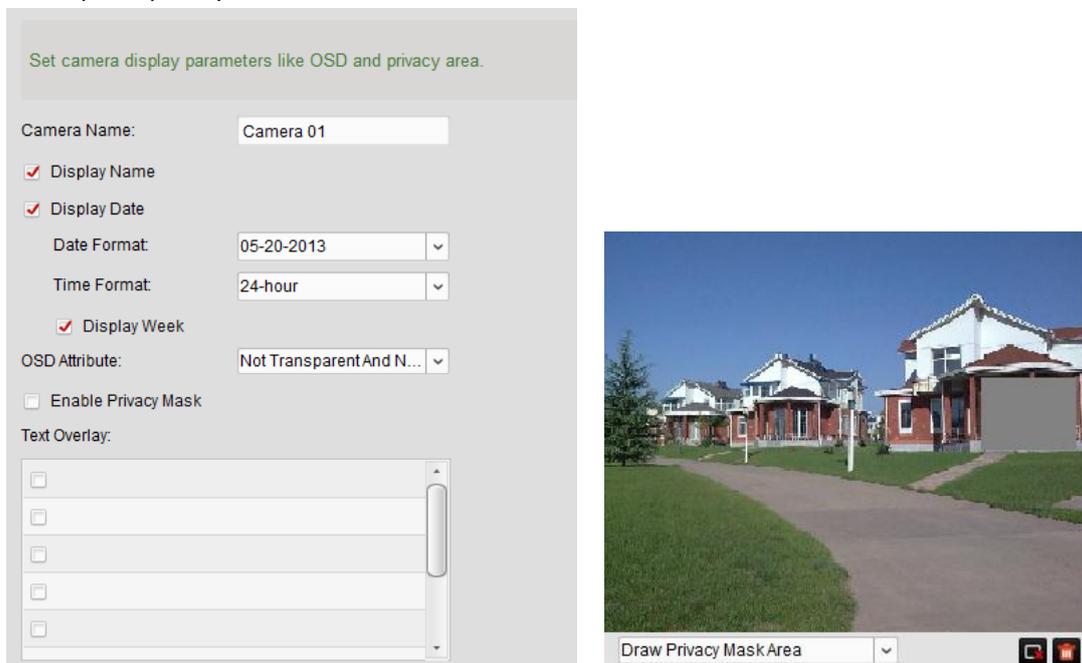
Purpose:

You can configure on screen display(OSD) settings and the privacy mask can be defined on the screen to protect the individual privacy if needed.

Steps:

1. Open the Camera Settings page and click  to enter the Video Display interface.
2. Select the camera from the drop-down list on the left-side of the page.
3. Edit the camera name in the text field.
4. Check the checkbox to enable the camera name display, date display and week display. You can also set the format of the date and time.
5. Select the OSD attribute from the drop-down list.
4 types of OSD attributes are selectable: Transparent And Flash, Transparent And Not Flash, Flash And Not Transparent, Not Flash And Not Transparent .
6. Check the checkbox **Enable Privacy Mask** to enable the privacy mask function.
Perform the following steps to draw a privacy mask:
 - 1) Select Draw Privacy Mask Area from the drop-down list under the live video window.
 - 2) Click-and-drag the mouse on the live video to draw a rectangle area as the privacy mask.
 - 3) Adjust the size of the privacy mask and move it to the desired location.
You can click the icon  to remove the selected privacy mask from the screen.
You can click the icon  to remove all the privacy masks from the screen.
7. Edit the text overlay on the screen.
Perform the following steps to edit and display the text overlay on the screen:
 - 1) Check the checkbox in the Text Overlay field.
 - 2) Click on the text field, and you can edit the content of the overlay.
 - 3) Move the text overlay to the desired location on the screen.
8. Click **Confirm** to save the settings.

Note: Up to 4 privacy masks can be defined for each camera.



The screenshot displays the 'Set camera display parameters like OSD and privacy area' configuration window. It includes the following settings:

- Camera Name: Camera 01
- Display Name
- Display Date
- Date Format: 05-20-2013
- Time Format: 24-hour
- Display Week
- OSD Attribute: Not Transparent And N...
- Enable Privacy Mask
- Text Overlay: A list of five empty text fields, each with a checkbox to its left.

On the right side of the screenshot, a live video feed of a residential street is shown. A grey rectangular privacy mask is drawn over a portion of the video. Below the video, there is a dropdown menu labeled 'Draw Privacy Mask Area' and two icons: a square with a red 'X' and a red square with a white 'X'.

9.1.4 PTZ Control

Purpose:

The PTZ parameters should be consistent with the settings of the camera side to ensure valid PTZ

control.

Step:

1. Open the Camera Settings page and click  to enter the PTZ Control interface.
2. Select the camera from the drop-down list on the left-side of the page.
3. Select the PTZ parameters, such as baud rate, data bit, stop bit, etc., from the drop-down list.
4. Optionally, you can click **Test**, and do some PTZ operations to test the parameters.
5. Click **Confirm** to save the settings.

Set PTZ parameters, e.g. baud rate, protocol, address, etc.

Baud Rate:	9600	▼
Data Bit:	8	▼
Stop Bit:	1	▼
Parity:	None	▼
Flow Control:	None	▼
Protocol Type:	SELFDEF	▼
PTZ Address:	0	<input type="button" value="Test"/>

9.2 System Configuration

Purpose:

The general parameters, file saving paths, keyboard and joystick shortcuts, alarm sounds and other system settings of PCNVR can be configured.

Click the  icon on the Configuration panel,

or click **Tool->System Configuration** to open the System Configuration page.

System Configuration

System Information	Software Version:	V2.0.1 build 130503
General	Serial No:	DS-PCNVR-V201B2013050
Path	Record Disk Number:	5
Network Settings	Disk Overwrite:	Yes
Keyboard and Joystick		
Alarm Sound		
Email		

Confirm Cancel Apply

9.2.1 System Information

Steps:

1. Open the System Configuration page.
2. Click the **System Information** tab. You can view the system information of PCNVR. For details, see *Table 9.1 Descriptions of System Information*.

Software Version:	V2.0.1 build 130503
Serial No.:	DS-PCNVR-V201B2013050
Record Disk Number:	5
Disk Overwrite:	Yes

Table 9.1 Descriptions of System Information

System Information	Descriptions
Software Version	The version information of the software (read-only).
Serial No.	The serial No. of PCNVR (read-only).
Record Disk Number	The number of local PC disks which are available for PCNVR (read-only).
Disk Overwrite	Whether the video files recorded on the disk can be overwritten.

9.2.2 General Parameters

1. Open the System Configuration page.
2. Click the **General** tab to enter the General Parameters interface.
3. Configure the general parameters of the software. For details, see *Table 9.2 General Parameters*.
4. Click **Confirm** to save the settings.

View Scale:	Full Screen
Network Performance:	Best
Play Performance:	Low Medi... High
<input checked="" type="checkbox"/>	Enable Screen Toolbar Display
<input type="checkbox"/>	Enable Auto-login
<input checked="" type="checkbox"/>	Resume Live View Status
<input checked="" type="checkbox"/>	Auto-Change Stream Type

Parameters	Descriptions
View Scale	The view scale of the video in live view or playback. It can be set as Full Screen, 4:3, 16:9 or Original Resolution.
Network Performance	The current network conditions. It can be set as Bad, Normal, Better or Best.
Play Performance	The play performance of live video. It can be set as Low, Medium or High.
Enable Screen Toolbar	Show the toolbar on each display window in live view or playback.

Display	
Enable Auto-login	Log in the software automatically.
Resume Live View Status	Resume the latest live view status after you log in the software again.
Auto-change Stream Type	Change the stream type automatically in live view according to the size of the display window.

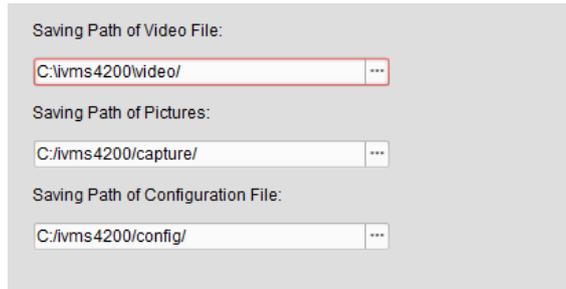
9.2.3 File Saving Path Settings

Purpose:

The video files backup, the captured pictures and the system configuration files are stored on the local PC. The saving paths of these files can be configured.

Steps:

1. Open the System Configuration page.
2. Click the **Path** tab to enter the File Saving Path Settings interface.
3. Click the icon  and select a local path for the files.
4. Click **Confirm** to save the settings.



Saving Path of Video File:
C:\ivms4200\video/

Saving Path of Pictures:
C:\ivms4200\capture/

Saving Path of Configuration File:
C:\ivms4200\config/

9.2.4 Network Settings

General Settings

Steps:

1. Open the System Configuration page.
2. Click the **Network Settings->General** tab to enter the General Network Settings interface.
3. Configure the general network parameters of PCNVR, such as device port, subnet mask, alarm host IP, etc.
4. Click **Confirm**, and reboot the PCNVR to activate the new settings.

General	DDNS	NTP
NIC Type:	1000M Full-dup	
Device IP Address:	<input type="text" value="172.6.23.106"/>	
Device Port:	<input type="text" value="8000"/>	
Subnet Mask:	<input type="text" value="255.255.255.0"/>	
Gateway:	<input type="text" value="172.6.23.1"/>	
DNS Server Address 1:	<input type="text" value="10.1.7.88"/>	
DNS Server Address 2:	<input type="text" value="10.1.7.77"/>	
Alarm Host IP:	<input type="text" value="0.0.0.0"/>	
Alarm Host Port:	<input type="text" value="0"/>	
HTTP Port:	<input type="text" value="80"/>	
RTSP Port:	<input type="text" value="554"/>	

DDNS Settings

You can use the DDNS method to avoid the complexity of accessing by the dynamic IP address.

Steps:

1. Open the System Configuration page.
2. Click the **Network Settings**->**DDNS** tab to enter the DDNS Settings interface.
3. Check the checkbox **Enable DDNS** to enable the DDNS function.
4. Select the protocol type from the drop-down list.
5. Input the required information, such as protocol type, server address, etc.
6. Click **Apply** to save the settings.

General	DDNS	NTP
<input checked="" type="checkbox"/> Enable DDNS		
Protocol Type:	<input type="text" value="HIDDNS"/>	
Server Address:	<input type="text" value="www.hik-online.com"/>	
User Name:	<input type="text"/>	
Password:	<input type="text"/>	
Confirm:	<input type="text"/>	
Device Domain Name:	<input type="text"/>	

NTP Settings

You can configure the NTP server to synchronize the system time at a certain time interval.

Steps:

1. Open the System Configuration page.
2. Click the **Network Settings**->**NTP** tab to enter the NTP Settings interface.
3. Check the checkbox **Enable NTP** to enable the NTP function.
4. Input the required information.

Server Address: Input the NTP server address for time synchronization.

NTP Port: Input the port number of NTP service. The default value is 123.

Synchronization Interval: Set the interval time for synchronization.

Time Zone: Select the time zone from the drop-down list.

5. Click **Confirm** to save the settings.

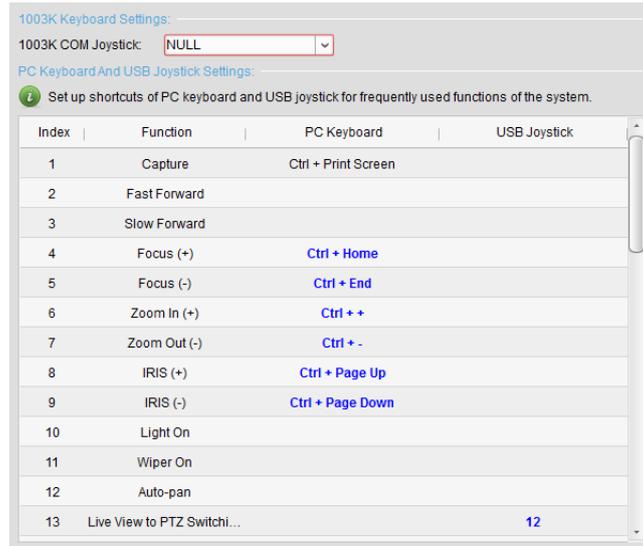
9.2.5 Keyboard and Joystick Shortcuts Settings

Purpose:

DS-1003 keyboard can be connected to PCNVR and be used to control the PTZ cameras. You can set the shortcuts of PC keyboard and USB joystick to get quick and convenient access to the commonly used actions.

Steps:

1. Select the COM port from the drop-down list if 1003K keyboard is connected.
2. Select a certain function from the list.
3. Double-click the item field under the PC Keyboard or USB Joystick column.
4. Select the compound keys operation or USB joystick operation from the drop-down list.
5. Click **Confirm** to save the settings.



9.2.6 Alarm Sound Settings

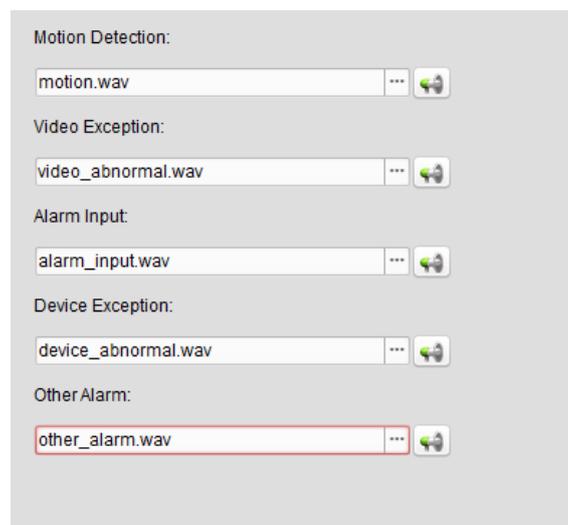
Purpose:

When the alarm, such as motion detection alarm, video exception alarm, etc., is triggered, PCNVR can be set to give an audible warning and the sound of the audible warning can be configured.

Steps:

1. Open the System Configuration page.
2. Click the **Alarm Sound** tab to enter the Alarm Sound Settings interface.
3. Click the icon  and select the audio files from the local path for different alarms.
4. Optionally, you can click the icon  for a testing of the audio file.
5. Click **Confirm** to save the settings.

Note: The format of the audio file can only be *.wav.



9.2.7 Email Settings

Purpose:

An Email notification can be sent when a system alarm occurs. To send an email to some specified receivers, the settings of the Email need to be configured before proceeding.

Steps:

1. Open the System Configuration page.
2. Click the **Email** tab to enter the Email Settings interface.
3. Check the checkbox **Server Authentication** to enable the Email service.
4. Input the required information.

SMTP Server: Input the SMTP Server address.

Port: Input the communication port of Email service. The port is 25 by default.

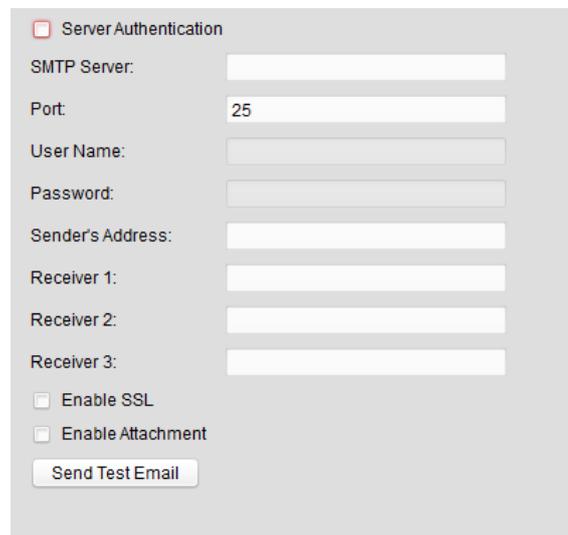
User Name: Input the user name of the sender Email address.

Password: Input the password of the sender Email address.

Sender's Address: Input the Email address of the sender.

Receiver 1—3: Input the Email address of the receiver. Up to 3 receivers can be set.

5. Optionally, you can check the checkbox **Enable SSL** to increase the security of email sending.
6. Optionally, you can check the checkbox **Enable Attachment** to send email with attachment.
7. Optionally, you can click **Send Test Email** to send an email to the receiver for test.
8. Click **Confirm** to save the settings.



The screenshot displays the Email Settings configuration page. At the top, there is a checkbox labeled "Server Authentication" which is currently unchecked. Below this, there are several input fields: "SMTP Server:" (empty), "Port:" (containing the number "25"), "User Name:" (empty), "Password:" (empty), "Sender's Address:" (empty), "Receiver 1:" (empty), "Receiver 2:" (empty), and "Receiver 3:" (empty). At the bottom of the form, there are two more checkboxes: "Enable SSL" (unchecked) and "Enable Attachment" (unchecked). A button labeled "Send Test Email" is located at the very bottom of the configuration area.

Chapter 10 Web Browsing

Purpose:

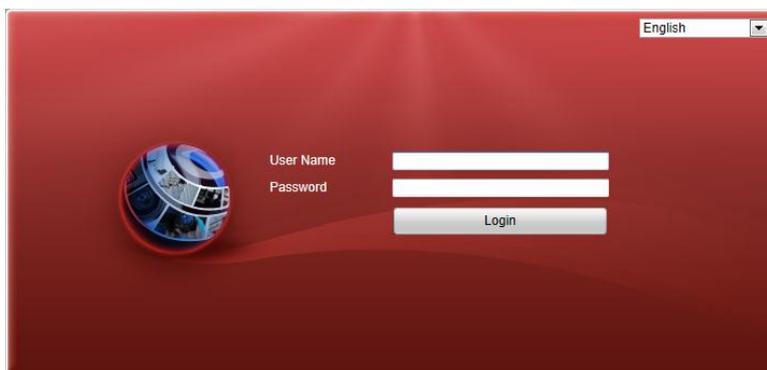
iVMS-4200 PCNVR can also be accessed through web browsing. It provides the functionalities of live view, playback, log management, system configuration, etc.

10.1 Login

Steps:

1. Input the IP address of the PC running PCNVR in the address bar of the web browser, and press the **Enter** key. A login window will pop up.
2. Input the user name and password of PCNVR.
3. Click **Login**.

Note: You can set the language as Chinese or English in the upper-right corner of the login interface.



10.2 Disk Management

Steps:

1. Enter the Disk Management interface:
Configuration->Remote Configuration->HDD Management->Basic Settings
2. Check the checkbox to select the HDD. You can check the box **Select All** to select all the HDDs.
3. Click **Format** to pre-allocate the selected HDD for record files storage.
4. Reboot the PCNVR to activate the new settings. The status of the pre-allocated HDD changes from *Uninitialized* to *Normal*.

Note: The original data of pre-allocated HDDs will not be deleted.

HDD Management

HDD No.	Capacity	Free space	Status	Type	Property
HDD01	3.05GB	1.38GB	Uninitialized	Local	R/W
HDD02	39.53GB	1.19GB	Normal	Local	R/W
HDD03	327.06GB	301.74GB	Uninitialized	Local	R/W
HDD04	15.62GB	7.08GB	Uninitialized	Local	R/W
HDD05	1945.60GB	579.04GB	Uninitialized	Local	R/W

HDD No. Property

[HDD Initialization](#)

Select All

10.3 Camera Management

Purpose:

Before doing any operations via the web browser, cameras or video encoders need to be added to the system for monitoring and management. You can add devices through the web browser.

Click **Configuration->Remote Configuration->Camera Management->IP Camera** to enter the Camera Management interface.

Live View Playback Log **Configuration** admin Logout

Configuration

- Local Configuration
- Remote Configuration
 - Device Parameters
 - Device Information
 - Time Settings
 - Camera Settings
 - Display Settings
 - Video Settings
 - Schedule Settings
 - Motion Detection
 - Video Loss
 - Privacy Mask
 - Tamper-proof
 - Text Overlay
 - Network Settings
 - Serial Port Settings
 - Alarm Settings
 - Exception
 - User Management
 - HDD Management
 - Maintenance
 - Camera Management
 - IP Camera**

IP Camera

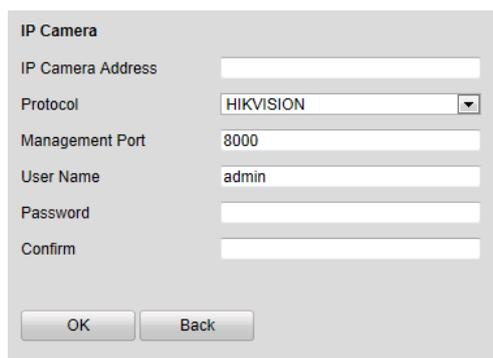
Add Modify Delete Quick Add

Channel No.	IP Camera Address	Channel No.	Management Port	Status	Protocol
D01	172.8.23.177	1	8000	Online	HIKVISION
D02	172.8.23.124	1	8000	Online	HIKVISION

Adding the Camera

Steps:

1. Click **Add** to open the camera adding dialog box.
2. Input the IP address, user name, password and other information of the camera.
3. Click **OK** to add the camera. You can check the status of the added cameras, such as IP address, channel number, port, etc., from the camera list.



The image shows a dialog box titled "IP Camera" with the following fields and controls:

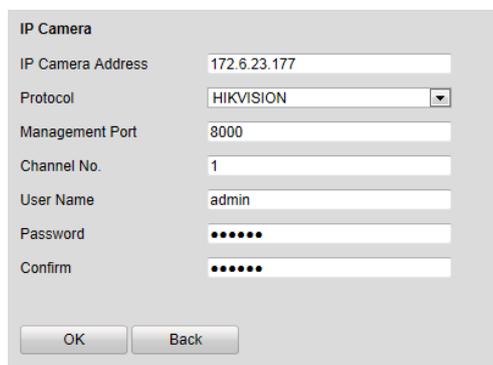
IP Camera Address	<input type="text"/>
Protocol	HIKVISION <input type="button" value="v"/>
Management Port	8000 <input type="text"/>
User Name	admin <input type="text"/>
Password	<input type="password"/>
Confirm	<input type="password"/>

At the bottom, there are two buttons: "OK" and "Back".

Modifying the Camera

Steps:

1. Select the camera from the list and click **Modify** to open the camera modifying dialog box.
2. Modify the information of the selected camera.
3. Click **OK** to save the new settings.



The image shows the same "IP Camera" dialog box, but with the following values entered:

IP Camera Address	172.6.23.177
Protocol	HIKVISION <input type="button" value="v"/>
Management Port	8000
Channel No.	1
User Name	admin
Password	•••••
Confirm	•••••

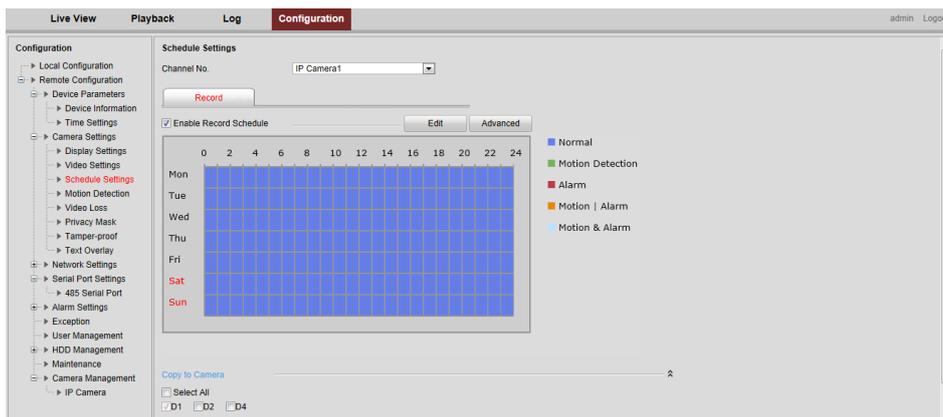
At the bottom, there are two buttons: "OK" and "Back".

Deleting the Camera

Select the camera from the list and click **Delete**. Then you can remove the selected camera from the PCNVR.

10.4 Record Schedule Settings

Click **Configuration->Remote Configuration->Camera Settings->Schedule Settings** to enter the Record Schedule Settings interface.



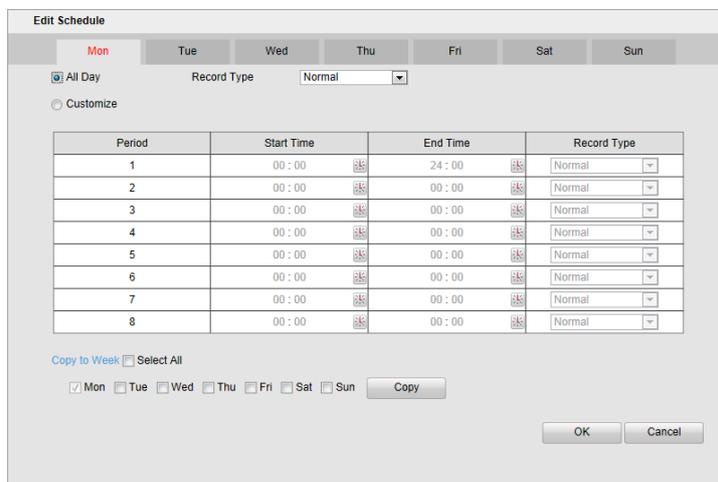
Before you start:

The HDDs of local PC need to be pre-allocated for record files storage.

Steps:

1. Select the channel No. from the drop-down list.
2. Check the checkbox **Enable Record Schedule** to enable the schedule record function.
3. Click **Edit** to open the Template Settings page.
4. You can set the schedule as Add Day and you can also customize the schedule as desired.
5. Select the record type from the drop-down list. 5 record types are selectable:
 - Normal:** for all-day continuous recording.
 - Motion Detection:** for motion detection triggered recording.
 - Alarm:** for alarm input triggered recording.
 - Motion | Alarm:** for alarm input triggered or motion detection triggered recording.
 - Motion&Alarm:** for alarm input and motion detection triggered recording.
6. Optionally, you can copy the template settings to other dates.
7. Click **OK** to save the settings and close the Template Settings page.
8. Optionally, you can copy the record schedule settings to other cameras.
9. Click **Save** to save the record schedule settings.

Note: Up to 8 time periods can be set for each day in the record schedule.



10.5 Live View

Purpose:

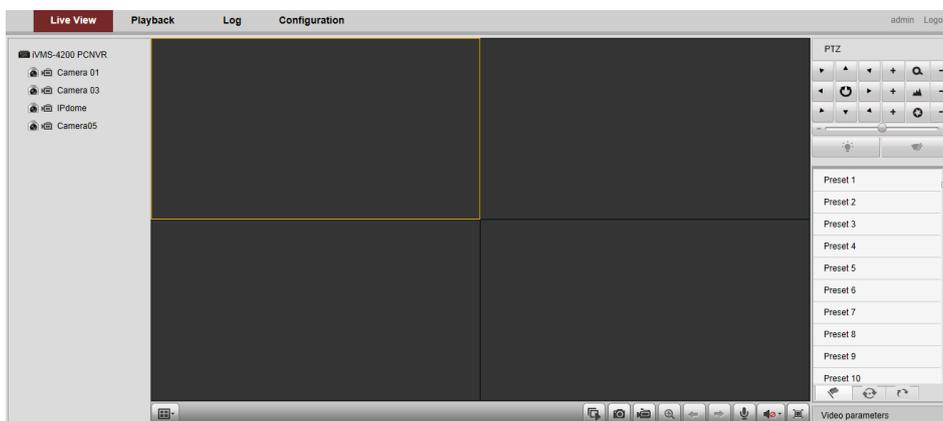
On the Live View page, you can view the live video of the added cameras and do some basic operations, including picture capturing, recording, PTZ control, etc.

Before you start:

Cameras or video encoders need to be added to PCNVR for live view.

Note: If it is the first time for live view, the system will remind you to install the ActiveX control. Click and install the ActiveX control.

Click the **Live View** tab to enter the Live View interface.



Live View Toolbar:



On the Live View interface, the following toolbar buttons are available:

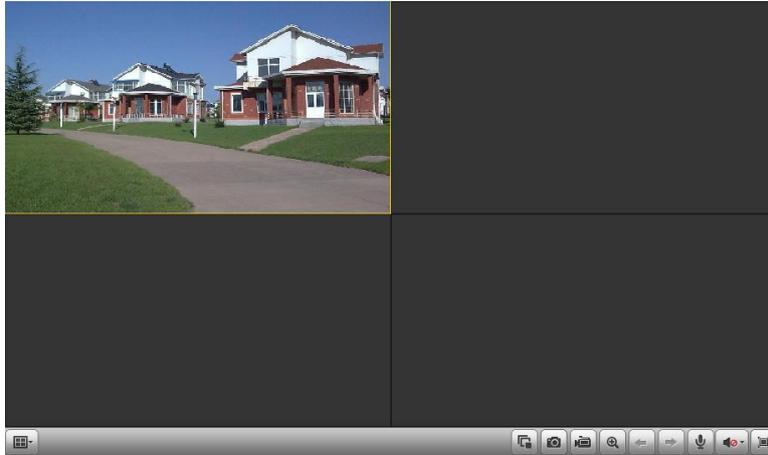
	Set View	Set the screen layout mode. 2 types of screen layout modes are selectable: 1-Screen and 4-Screen.
	Start/Stop Live View	Start/Stop the live view of all cameras.
	Capture	Capture the picture in the live view process.
	Start/Stop Recording	Click to start/stop the manual recording of all cameras in live view.
	Enable/Disable Digital Zoom	Enable/Disable the digital zoom function.
	Previous Page	Go for live view of the previous page.
	Next Page	Go for live view of the next page.
	Start/Stop Two-way Audio	Click to start/stop the two-way audio function of the camera.
	Audio On/Audio Off	Click to turn on/off the audio and adjust the audio volume.
	Full Screen	Display the live view in full screen. Press Esc to exit.

Steps:

1. Click the icon  to select the screen layout mode.
2. Select the display window for live view.
3. Double-click the camera name in the camera list to start the live view.

- To stop the live view, double-click the camera name again.

You can also click the icon  in the toolbar to start/stop the live view of all cameras on the list.

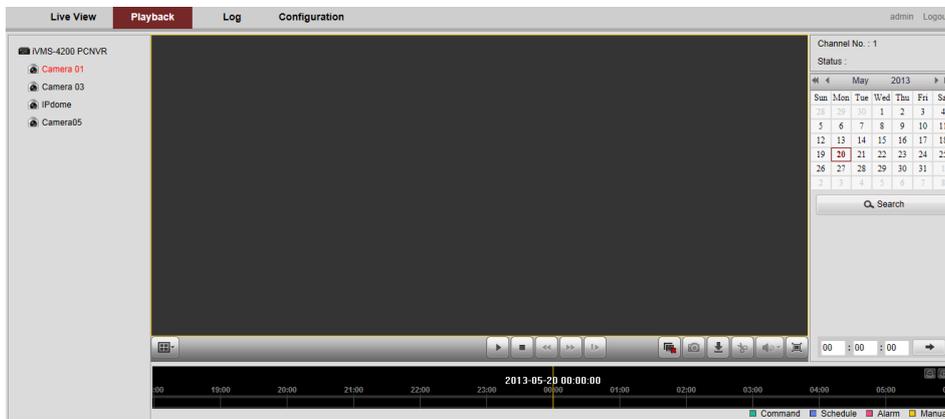


10.6 Playback

Purpose:

The record files stored on the PCNVR can be searched and played back remotely through the web browser.

Click the **Playback** tab to enter the Playback interface.



Playback Toolbar:



On the Playback interface, the following toolbar buttons are available:

- | | | |
|---|---------------------|---|
|  | Set View | Set the screen layout mode. 3 types of screen layout modes are selectable: 1-Screen, 4-Screen and 9-Screen. |
|  | Play/Pause | Resume/Pause the playback of record files. |
|  | Stop | Stop the playback of record files. |
|  | Slow Forward | Decrease the playback speed of record files. |
|  | Fast Forward | Increase the playback speed of record files. |

	Single Frame	Play back the record files frame by frame.
	Stop All Playback	Stop the playback of all cameras.
	Capture	Capture the picture in the live view process.
	Download	Download the record files to local PC for backup.
	Start/Stop Clipping	Start/Stop clipping the record files.
	Audio On/Audio Off	Click to turn on/off the audio and adjust the audio volume.
	Full Screen	Display the live view in full screen. Press Esc to exit.

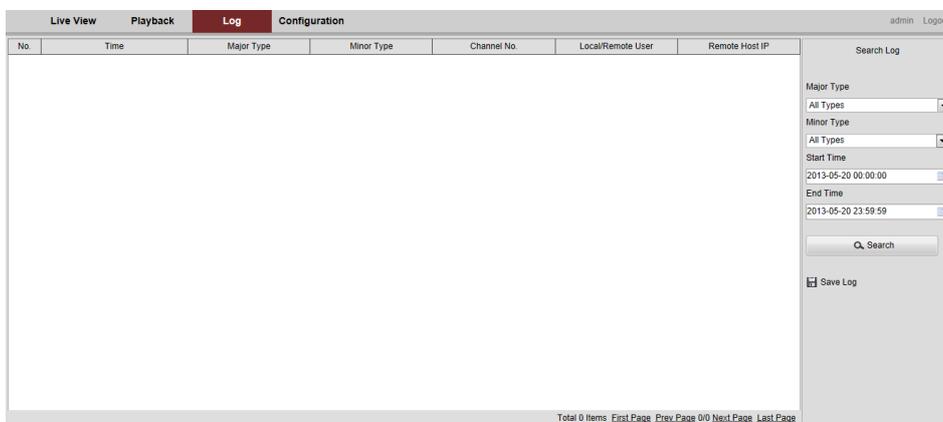
Steps:

1. Select the camera from the camera list.
2. Select the day for search on the calendar.
3. Click **Search**. The search results will be displayed on the timeline.
4. Click on the timeline to specify start time for playback. The timeline indicates the time duration for the record files, and the record files of different types are color coded.
You can click  or  to scale up or scale down the timeline bar.
You can click-and-drag the timeline to go to the previous or next time period.
5. Click the icon  to start the playback. To stop the playback, click .



10.7 Log Management

Click the **Log** tab to enter the Log Management interface.



Steps:

1. Select the major type and corresponding minor type of log files for search.

2. Click the icon  to specify the start time and end time.
3. Click **Search**. The search results will be displayed on the list, and you can check the operation time, the type, the user and other information of the log files.
4. Select the log from the list, click **Save Log**, and you can save the selected log file on the local PC.

No.	Time	Major Type	Minor Type	Channel No.	Local/Remote User	Remote Host IP
1	2013-05-20 08:39:19	Operation	Power On			0.0.0.0
2	2013-05-20 08:39:25	Alarm	Start Motion Detection	2		172.6.23.124
3	2013-05-20 08:39:25	Information	Start Recording	1		0.0.0.0
4	2013-05-20 08:39:25	Information	Start Recording	2		0.0.0.0
5	2013-05-20 08:39:32	Operation	Local Login			0.0.0.0
6	2013-05-20 08:39:48	Alarm	Stop Motion Detection	2		172.6.23.124
7	2013-05-20 08:40:10	Alarm	Start Motion Detection	2		172.6.23.124
8	2013-05-20 08:40:22	Alarm	Stop Motion Detection	2		172.6.23.124
9	2013-05-20 08:40:28	Alarm	Start Motion Detection	2		172.6.23.124
10	2013-05-20 08:40:39	Alarm	Stop Motion Detection	2		172.6.23.124
11	2013-05-20 08:40:39	Alarm	Start Motion Detection	2		172.6.23.124
12	2013-05-20 08:40:51	Alarm	Stop Motion Detection	2		172.6.23.124
13	2013-05-20 08:40:51	Alarm	Start Motion Detection	2		172.6.23.124
14	2013-05-20 08:42:40	Operation	Local Logout			0.0.0.0
15	2013-05-20 08:42:41	Operation	Local Shutdown			0.0.0.0
16	2013-05-20 08:42:41	Information	Stop Recording	1		0.0.0.0
17	2013-05-20 08:42:41	Information	Stop Recording	2		0.0.0.0
18	2013-05-20 08:42:44	Operation	Remote Alarm Disarming			0.0.0.0
19	2013-05-20 08:42:47	Alarm	Stop Motion Detection	2		172.6.23.124
20	2013-05-20 08:43:09	Operation	Power On			0.0.0.0
21	2013-05-20 08:43:15	Alarm	Start Motion Detection	2		172.6.23.124
22	2013-05-20 08:43:16	Information	Start Recording	1		0.0.0.0
23	2013-05-20 08:43:16	Information	Start Recording	2		0.0.0.0
24	2013-05-20 08:43:16	Operation	Local Login			0.0.0.0
25	2013-05-20 08:44:19	Operation	Remote Login		admin	172.6.23.106
26	2013-05-20 08:44:30	Operation	Remote Logout		admin	172.6.23.124
27	2013-05-20 08:48:59	Alarm	Stop Motion Detection	2		172.6.23.124
28	2013-05-20 08:49:00	Alarm	Start Motion Detection	2		172.6.23.124
29	2013-05-20 08:51:59	Operation	Remote Login		admin	172.6.23.106
30	2013-05-20 08:52:51	Alarm	Stop Motion Detection	2		172.6.23.124
31	2013-05-20 08:52:55	Operation	Remote Logout		admin	172.6.23.106
32	2013-05-20 08:52:58	Alarm	Start Motion Detection	2		172.6.23.124
33	2013-05-20 08:59:04	Alarm	Stop Motion Detection	2		172.6.23.124
34	2013-05-20 08:59:07	Alarm	Start Motion Detection	2		172.6.23.124
35	2013-05-20 08:59:24	Alarm	Stop Motion Detection	2		172.6.23.124
36	2013-05-20 08:59:44	Alarm	Start Motion Detection	2		172.6.23.124
...
Total 1650 Items						First Page Prev Page 1/17 Next Page Last Page



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